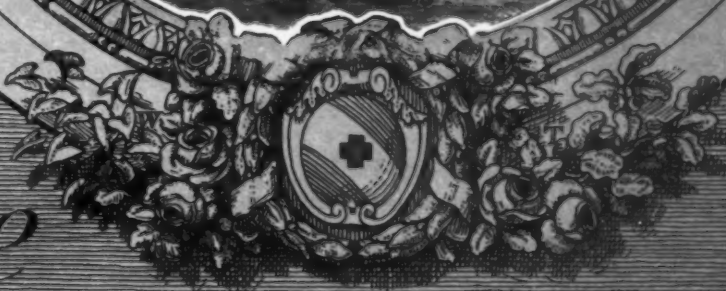


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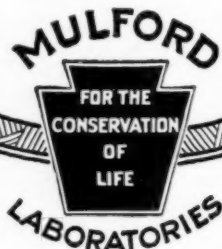


THE TEMPLE  
OF THE HIERON OF AESCULAPIUS  
AT EPIDAUURIUM



*The*  
**MODERN  
HOSPITAL**

Vol. IX      December, 1917      No. 6



# “An Ounce of Prevention Is Worth a Pound of Cure”

**Immunize your patients** against Influenza and “Colds” **NOW. Do not wait** until respiratory affections are prevalent.

**Influenza Serobacterin Mixed Mulford** will give immunity from “Colds” and Influenza to a large percentage of patients infected by the organisms used in preparing the Serobacterin.



Supplied in packages containing four aseptic glass syringes as follows:

	Syr. A	Syr. B	Syr. C	Syr. D
B. influenzae .....	125	250	500	1000 million
Staphylococcus albus .....	125	250	500	1000 million
Staphylococcus aureus .....	125	250	500	1000 million
Streptococcus .....	125	250	500	1000 million
Pneumococcus .....	125	250	500	1000 million
M. catarrhalis (group) .....	125	250	500	1000 million

## Mulford Typho-Serobacterin

**For Immunization and Treatment of Typhoid Fever**

The value of immunizing against typhoid fever is established. The results secured by the Armies and Navies of all Nations now at war absolutely prove its efficiency. Supplied in packages of three aseptic glass syringes, graduated as follows:

	1st Dose	2nd Dose	3rd Dose
Bacillus typhosus .....	1000	2000	2000 million
B. paratyphosus “A” .....	500	1000	1000 million
B. paratyphosus “B” .....	500	1000	1000 million

Also supplied in 4-syringe therapeutic package and 5 c.c.

**Typho-Serobacterin Mixed** is coming into general favor for immunization as well as treatment. It affords immunity against the typhoid and the paratyphoid “A” and “B” bacilli present in about 10% of typhoid cases.

Literature describing method of treatment and dosage, together with special educational bulletins for distribution to your patients, sent on request.

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# THE MODERN HOSPITAL

*A Monthly Journal Devoted to the Building, Equipment, and Administration of Hospitals, Sanatoriums, and Allied Institutions, and to their Medical, Surgical, and Nursing Services*

Vol. IX

December, 1917

No. 6

## THE PRIVATE WARD OF THE MASSACHUSETTS GENERAL HOSPITAL

### A New Departure for This Hospital—No Provision Hitherto Made for Private Patients— Special Features of Equipment and Arrangement

By JOSEPH B. HOWLAND, M. D., ACTING RESIDENT PHYSICIAN OF THE MASSACHUSETTS GENERAL HOSPITAL, BOSTON

THE opening of the Private Ward of the Massachusetts General Hospital marks an important step in the history of the hospital.

During the past one hundred years since it has received the sick, the well-to-do, who have so generously aided this oldest of Massachusetts hospitals, have been excluded from its benefits, no matter how much they needed hospital care. No provision had been made for the reception of private patients, and members of the visiting staff were not permitted to receive a fee or gift from a patient.

The new building is, properly speaking, a private hospital rather than a ward, having a separate entrance from the rest of the hospital, its own kitchen, dining room, apothecary shop, store, x-ray plant, and operating rooms.

The building is of eight stories, the exterior of limestone and red water-struck brick, laid in

Flemish bond, with dark headers. It is L-shaped, with the longer wing extending north and south, thus exposing all the patients' rooms to the east and west. The short leg of the L contains the service rooms. The interior construction is of terra cotta and steel frame. The floors are of concrete, covered with brown or green American battleship linoleum. The bath rooms and service rooms have terrazzo floors, and all corridors and rooms have a 4-inch terrazzo base set at an angle of 45 degrees, which serves the double



New private ward of the Massachusetts General Hospital.

purpose of making the cleaning easier and keeping the furniture from injuring the walls. There are two elevators, one at the southern end for

patients' use and large enough to take a bed, and another in the service wing for general use. The ward accommodates 102 patients, the rooms being nearly all provided with connecting doors to permit assigning small or large suites. Interchange-

for kitchen, etc. The apothecary shop, locker rooms for special nurses and men and women help, the store rooms, the kitchen, and the nurses' and help's dining rooms are in the basement. The kitchen has the usual equipment, except that all

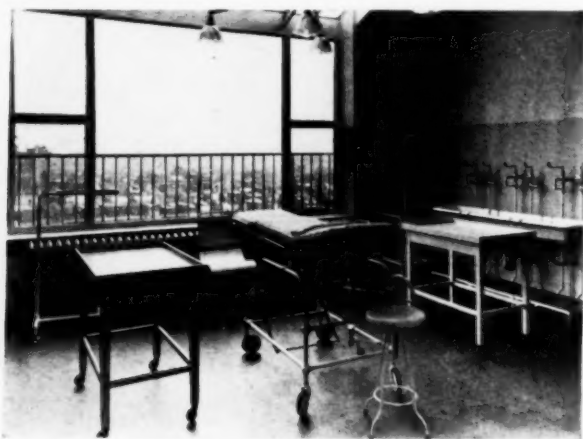


Fig. 2. One of four operating rooms.



Fig. 5. Sun parlor on the eighth floor.

able guards may be placed in all bedroom windows. Covered balconies, to which beds may be rolled, are located at the south end of each floor. On three floors in the service wing provision is made to care temporarily for a patient who might disturb others in the main wing.

#### BASEMENT

An ambulance entrance



Fig. 3. Library, located opposite the entrance.

jacket kettles, sinks, and vegetable steamer-tables are on pedestals with sanitary bases in place of the usual legs so hard to clean around. The kitchen floor is of black slate and the walls of glazed brick.

#### FIRST FLOOR

The main entrance of the building is located in the center, with a library opposite the entrance.



Fig. 4. Typical south veranda for patients, showing Charles river in background.



Fig. 6. Part of kitchen, showing sanitary base to all fixtures and ventilating hoods built into ceiling.

is provided near the elevator. The morgue is also located at this end of the building and connects with a room equipped for performing autopsies. Two Audffren refrigerating machines provide for ice-making and for the necessary refrigerators

One-half of this floor is given up to the necessary offices, reception rooms, and x-ray rooms. The other wing provides six bedrooms for patients. A covered corridor connects this floor with the main hospital, and furnishes a convenient ar-



rangement of intercommunication. An electrical recorder located in the main office registers the patients' signals and the time of nurses' response, showing the intervening time that has elapsed.

as outlets for electric fans and lamps, and telephone wiring. Bedrooms having no fireplaces are connected by ducts to the roofs and ventilated by suction fans at the outlets. There is a sitting



Fig. 7. Nurses' dining room.



Fig. 9. Patient's bedroom.



Fig. 8. Patient's bedroom, showing indirect lighting, bedside light, signal system, and bed on wheels.



Fig. 10. Part of roof, showing covered portion in center.

#### TYPICAL FLOOR

The second to seventh floors are practically alike, each having fifteen bedrooms, some with bath rooms, others with toilet rooms, as may be seen by reference to accompanying floor plans. Each patient's room is connected by a Holtzer-Cabot Signal system with

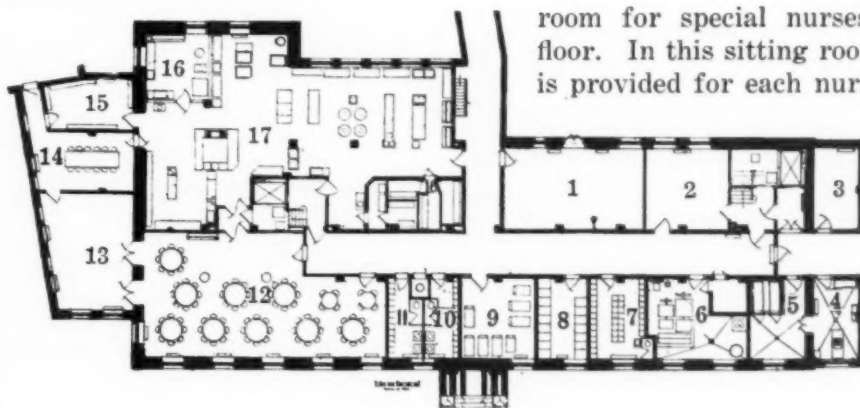


Fig. 11. Plan of Basement.

- |                         |                               |                                 |
|-------------------------|-------------------------------|---------------------------------|
| 1. Receiving room.      | 7. Nurses' locker room.       | 14. Kitchen help's dining room. |
| 2. Apothecary.          | 8. Trunk storage.             | 15. Pantry.                     |
| 3. Stores.              | 9. Food truck room.           | 16. Pastry kitchen.             |
| 4. Autopsy room.        | 10. Women's locker room.      | 17. Kitchen.                    |
| 5. Morgue.              | 11. Men's locker room.        |                                 |
| 6. Refrigerating plant. | 12, 13. Nurses' dining rooms. |                                 |

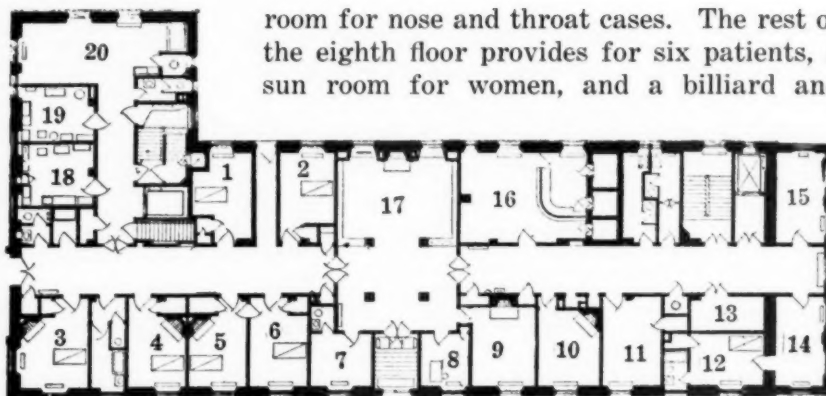
room for special nurses on each typical floor. In this sitting room a locked drawer is provided for each nurse.

In the service wing opposite the elevator there is a good-sized diet kitchen equipped with a china closet, tray rack, gas toaster, gas stove, steam-table, dish sterilizer, soapstone sink, and a ventilated, steam-

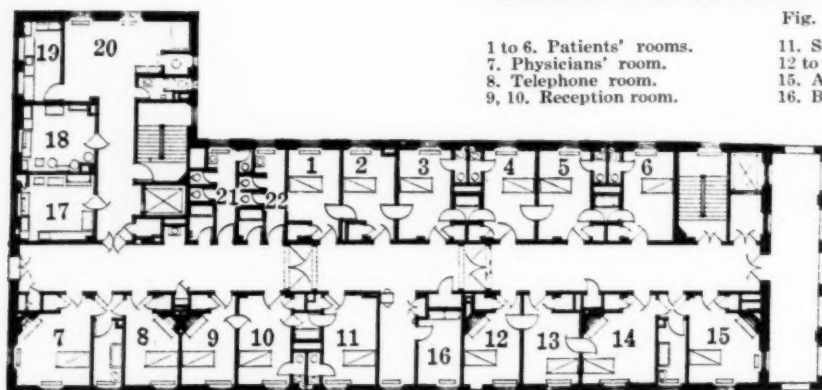
heated closet for drying towels. The service rooms are equipped with ventilated specimen closet, soapstone sink, utensil and bedpan sterilizers, bedpan rack and hopper, as well as

heated closet for drying towels. The service rooms are equipped with ventilated specimen closet, soapstone sink, utensil and bedpan sterilizers, bedpan rack and hopper, as well as

utensil stand and laundry bag holders. Ample space is allowed for the storage of stretchers and wheel chairs in this wing. A large refrigerator especially constructed for holding flowers is provided, together with a sink for arranging and watering them. On the second and seventh floors are well-equipped laboratories for clinical work.



room for nose and throat cases. The rest of the eighth floor provides for six patients, a sun room for women, and a billiard and



1 to 6. Patients' rooms.  
7. Physicians' room.  
8. Telephone room.  
9, 10. Reception room.

Fig. 12. Plan of first floor.

11. Superintendent's office.  
12 to 14. X-ray rooms.  
15. Administrator's office.  
16. Business office.

17. Library.  
18. Diet kitchen.  
19. Utility room.  
20. Wheel chair space.

smoking room for men. A large plaster room equipped for orthopedic work is also located on this floor.

#### ROOF

Both elevators run to the roof. It is tile-covered, surrounded by a low parapet surmounted with a high railing. There are toilet rooms for men and women, and a covered area to protect beds in

#### EIGHTH FLOOR

At the north end, shut off from the rest of the floor, are three operating rooms, a surgical pathological laboratory, the supply room, sterilizing room, surgeon's locker and wash room, nurses' wash room, two anesthetizing rooms, and a special operating

case of need.

The architects were Coolidge & Shattuck, Boston.

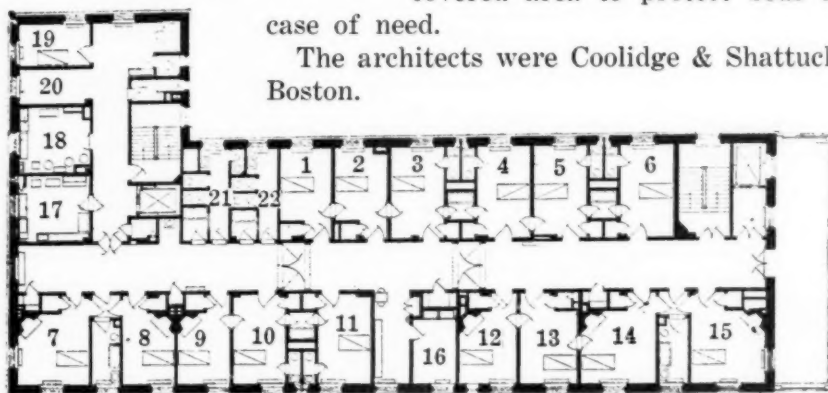


Fig. 14. Plan of third floor.

1 to 15. Patients' bedrooms.  
16. Nurses' sitting room.  
17. Diet kitchen.

18. Utility room.  
19. Patients' bedroom.

20. Wheel chair space.  
21, 22. Patients' toilet rooms.

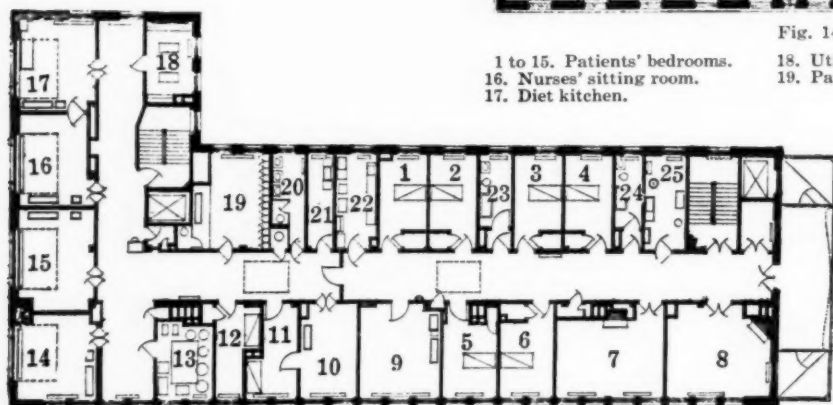


Fig. 15. Plan of eighth floor.

1 to 6. Patients' bedrooms.  
7. Billiard room.  
8. Sun parlor.  
9. Plaster room.  
10. Throat operating room.  
11, 12. Anesthetizing rooms.  
13. Sterilizing room.

14 to 16. Operating rooms.  
17. Surgical pathological laboratory.  
18. Supply room.  
19. Surgeons' locker and wash room.  
20. Nurses' wash room.

21. Instrument washing room.  
22. Diet kitchen.  
23, 24. Patients' toilet rooms.  
25. Utility room.

The question, what we want our public health nurse taught, is not easily answered. We want the finished product to possess so many of the attributes of perfection that, if we are to deal with ordinary human nature, compromise will have to be accepted. All are familiar with the descriptions of the necessary virtues required by those anxious to find the right woman for some form of social work, and many can sympathize with the weary head worker of a Children's Aid Society, who replied to such a request, "Madam, if I could find the woman you describe I should marry her, not pass her on to you."—Mary S. Gardner, "Public Health Nursing."



## STANDARDS OF ALMSHOUSE ADMINISTRATION\*

**Necessities May Be Demanded, Comforts Asked for, Reasonable Pleasures Hoped for—  
Difficulty of Attaining Uniform Standards—Principles of Legislation—  
Necessity of Individual Investigation and Work**

BY FRANCIS BARDWELL, INSPECTOR OF ALMSHOUSES, STATE BOARD OF CHARITY, BOSTON

THOSE of us whose business it is to deal with the affairs and management of institutions usually approach the subject through the main hallways; I feel that we would get further and see clearer if we came into the institution at the inmates' entrance and saw things from their point of observation.

We will say, then, that you and I, for reasons various, which may or may not be beyond our control, have come to that epoch in our lives when we are obliged to ask for assistance from public sources. Perhaps we have always been of those who have fought poverty and lived among those as poor or poorer than ourselves, wherein we are fortunate, or we may have been of those whose younger days knew prosperity and only through loss of our natural supporters and unfortunate circumstances have come to the point when existence can only continue by the aid of public relief. Whatever the cause of our dependence, the main point stands: we must be cared for at public expense, and by those in authority it is deemed best that we should be admitted to the almshouse.

When I have made application and been accepted I have a right to expect certain things pertinent to my comfort, welfare, and care. What they are I shall state and shall suggest how the almshouse administration may provide them.

1. I have a right to demand the common necessities; shelter, personal cleanliness, food, clothing, and medical attendance.

2. I have a right to ask for the following comforts: kindly attendance, quiet and decent quarters, reasonable freedom from objectionable fellow inmates, the opportunity of receiving visits from friends.

3. I hope to receive: some form of recreation, the pleasure of attendance at religious services at least monthly, employment suited to my age and physical condition, the right to protest, without detriment to myself, against any hardship I may feel that I am forced to bear.

I realize the first day of my sojourn in the almshouse that I am in a changed environment, and I hope I am reasonable enough to realize that the home exists, not for myself alone, but for all of us who accept the aid of the authorities.

#### I. THE THINGS WHICH SHOULD BE DEMANDED

First, then, I demand as my right—shelter. This means the almshouse building. If my community is prosperous, I shall enjoy comforts and luxuries I have seldom had. If the community is poor, even then I shall probably be housed as comfortably as I have hitherto been accustomed to be.

So much has been said and written on various types of almshouses that I do not feel called upon to discuss at any length almshouse plans or construction. Briefly, we need a building, properly heated, allowing for separation of sexes; ample fire protection and fire escapes; well-equipped kitchen and laundry; well-arranged sleeping quarters; intelligently planned sanitary conveniences; an assembly room, or dining room large enough to use for an assembly room; rest rooms for the women and smoking rooms for the men; adequate hospital accommodations; provisions for the superintendent; and, above all, proper, comfortable quarters for the employees. I emphasize the latter because its lack is the cause of inefficient and constantly changing help, a serious detriment to proper almshouse administration.

The smaller the house, the more chance that it is really a home, and the larger, the surer it is to be just an institution.

One adamant rule, large or small—the house must be clean—eternally, chemically, if necessary, but absolutely clean. It must be properly heated, and by that I mean we must not lose sight of the fact that people 72 years old consider a temperature of 72 degrees chilly.

It should be, in larger institutions, provided with real ventilation and a constant change of air, and reasonably free from drafts.

Beds should be standard iron; mattresses comfortable; blankets and not comforts. Benches, except for able-bodied men, are not furniture; every old man and woman should be provided with a comfortable chair. "Trivial," you say, but you are not an inmate; I have to sit on that uncomfortable bench hours a day. And while we are on the little things that to the inmate are big things, let me urge that, in the women's dining room at least, small tables be provided.

As for personal cleanliness, there should be generous provision for lavatories, and individual

\*Read at the forty-fourth annual National Conference of Charities and Correction, Pittsburgh, June 6-13, 1917.

towels are requisite. Bathing should be systematic and intelligently supervised.

That inmates are properly clothed is only the beginning of the clothing proposition. I am absolutely against uniforms for almshouse inmates; I mean the type of clothing lacking individuality and branding the wearer as a public charge.

Provision must be made in every almshouse for proper storage facilities—for the care of winter clothing during the summer—for cleaning, mending, and, if the institution is of sufficient size, for making clothing.

It should be a hard-and-fast rule in every institution that no new article is issued until the remnants of the article to be replaced are produced and destroyed. This is one potent factor in controlling waste.

Inmates have a right to expect clothing suited to their condition, occupation, if any, age, and the climate. As, for example, properly fitted shoes are a right.

In regard to food, what shall the standard be? A sufficient amount of well-cooked, nutritious food, varied and suited to the condition of the consumers. Invalids and the sick should have the advantage of a dietary provided by the physician.

A large institution is forced to employ the services of one particular physician; however, I feel that this should not mean that certain cases should not be allowed to have visits, at the public expense, from their own practitioner. There is criticism, from time to time, of the city or county doctor, and especially if he is a part of a political structure or working on a small per capita charge.

As an almshouse inmate I am entitled to good medical attendance, and I look to the administration to furnish the same standard as they employ in their own families. If I am seriously ill, I should not be turned over to the care of other inmates, but I have a right to demand proper nursing.

Shelter, food, clothing, personal cleanliness, medical attendance—these things I demand.

## II. THE THINGS WHICH MAY BE ASKED

I have a right to *ask* for kindly attendance. The selection of a superintendent and matron is no easy task for the poor directors. But the proper selection having been made, the problem of administration as far as the directors are concerned comes down to adequate supervision.

Whatever else a warden may possess in executive ability, he must be honest and kindly. We can get along without many other good qualities, but these two must be evident. It is well that he should be industrious, just, and economical. Even

a moderate drinker should not be considered for the position.

If a superintendent cannot be trusted with the purchasing end of the institution he should not be held responsible for an excessive per capita cost. He should do the buying and he should be held responsible. He should have the employing and discharging of his assistants and be responsible for them. In a word, he must be the responsible head of the institution, and, unless he is, the success of the institution is never assured.

The matron must be a woman who has lost her temper for all time, a good manager, and, in a word, a mother to the inmate family.

The administration must be conducted for the proper care of the inmates. The institution exists for its inmates—not for one type, one group, but as is best for all.

Proper care should never be subordinate to mere economy—that is, a parsimonious administration is seldom efficient, and the best possible care is in reality true economy.

We hear a good deal these days on the proper grouping of almshouse types. Shall it be according to age, according to physical or mental handicap, according to creeds, races—what?

When I am an almshouse inmate I want to be placed in a group with whom I can congenially mix. I protest, should I chance to be a cripple, at being lodged with cripples, fed with cripples, always associate with them. I want an optimistic outlook even in an almshouse. I want to be allowed to mingle with kindred spirits. Why change the social status of the world because I am within almshouse walls? The only successful grouping I have ever seen was along the above-described lines and in most cases was the result of natural selection on the part of the inmates themselves. I'm speaking from the inmates' standpoint.

Again, as to visits from friends: I expect to be able to receive my friends, if I have any left, when I am an inmate, at least once a fortnight. In most almshouses, why do they not come oftener? It is necessary in large institutions to have visiting hours, usually from two to four one afternoon a week. Did it ever occur to you that my friends are working hard from two to four every afternoon so that they may not be obliged to join me here permanently? Why not allow visiting from one to five every Sunday and every holiday? Because that time is not convenient to the superintendent and the assistants? Well—whose almshouse is it?

## III. THE THINGS WHICH MAY BE HOPED FOR

I have said what I have a right to demand, also



what I have a right to ask for or expect; now comes what I hope to receive.

The legal responsibilities of the authorities are to provide proper care and alleviate distress. Beyond that all is moral obligation, based on the conscience of the community. More and more we emerge from fixed rules, and as certain types formerly inmates have been cared for in other institutions and the almshouse population is slowly becoming standardized in most states, methods are coming into vogue that twenty years back would have been impossible.

And so now the almshouse inmate expects more of the administration and in progressive communities usually gets it. There is always the brake on the car of progress, the chief obstacle is the citizen who denounces a heating plant as too luxurious; then he protests against bathrooms, nurses, electric lights; he has much to say against the introduction of elevators in the older high buildings. His stock phrase is, "It's too good for a poorhouse and those who go there." He has a reason, many times, for his stand, and that reason lies in the unbusinesslike method of admitting and in the lack of investigation and lack also of a systematic housecleaning. He sees only the one man or woman personally known to him, whose life has been a riotous failure, and whose mental or physical collapse has necessitated custodial care; or he is acquainted, as we all are, with the winter inmate, who has to be outfitted at public expense, fed, and nursed, only to resume his usual summer career of fleeing from work. My friend the obstructionist, however, becomes a valuable ally when some unfortunate old man or woman in whom he is interested becomes an almshouse inmate; it is the same obstructionist who then demands things heretofore impossible, because they mean happiness for *his* particular friend.

I, as an inmate, want recreation, work, religious services, and the right to report abuses and not suffer for so reporting.

I think it should be the duty of the superintendent, with the strong backing of the directors, to enlist the cooperation of various church societies and fraternal orders so that entertainments can be provided for the almshouse people—talks, concerts, simple treats, and in some cases moving pictures. I believe that every almshouse should have its Christmas observance, a tree, little remembrances and gifts, and above all the Christmas spirit that to many poor old people banishes for a time the feeling of complete dependence. Men and women should be provided with games, papers, magazines, etc. I know one almshouse that provides a car ride and annual picnic; and another where one of the ladies of the community

opens her home for a whole day and entertains the old ladies. Such events provide pleasant anticipation and hours of wonderful memories. Rather a good investment in almshouse administration, as is anything that brings about the spirit of contentment.

We have not advanced rapidly in the matter of providing variety of labor for almshouse inmates. There is a strong sentiment against the manufacture for sale of articles that would compete with legitimate trade—pauper competition. This, however, should not prevent light work, suited to their age and physical condition, being provided for the inmates. The work test is a good indicator of character, and it is but human in the average superintendent to stretch the rules to their utmost to favor the willing and cheerful worker.

For the women there is always the family mending, general cleaning, ironing, assistance in the kitchen, and in the hospital department of the larger institution. However, it is surprising to note how few women who become almshouse inmates are able to use the needle. In some instances we find a little money earned by knitting, quilt-making, rug-making, and the like.

It is the task of the intelligent superintendent to fit the inmate to the proper kind of labor, nor should he forget that the shoemaker of the world may by preference forsake his last and become a good farmhand.

Beyond community labor—that is, the tasks performed for the benefit of all in the institution, the field for men is limited. A few men bring their trades with them and prefer to continue them, but they are few; perhaps this is because a majority of the men inmates come from the ranks of unskilled labor. Some men pick up the knack of making things easily, and if any encouragement is offered an industry will be established. If this is the case, a definite policy should be established. Articles must be sold through the office and visitors not importuned to buy. The money may revert to the maker if he or she can be trusted with it; if not, it can go into a community fund to be used to purchase extras for the hospital ward, for the Christmas dinner, for new records for the phonograph, or what not. At present this work is universally considered recreation, there being no obligation on the inmates' part. And, as previously mentioned, it is doubtful if the public would approve of workhouse methods in the average almshouse.

It is always a hard task to convince the average citizen that every almshouse inmate should do something, be it ever so little, as his bit for the community welfare. There is no question of the benefit to all concerned of such a measure and

without question most superintendents will report that in almshouses where a system of labor is properly handled complaints are few. I am not to give the impression, however, that all work should be done by inmate labor; it has its limitations.

If I am an inmate of an almshouse housing over a hundred inmates, I feel that religious services should be held at least monthly, preferably weekly. If the management will not arrange for such services at the home, then, if I am able and can be trusted, I should be allowed to go to church. If I have friends or relatives who are able to do so and care to have me visit them for a week or more and I am able to go, I should be allowed to go, but I should not be allowed to go if it has a detrimental effect upon my conduct when I return.

I want the right to protest to the directors or higher authorities against the fact that I am made to bear hardship or conditions unnecessarily harsh, without suffering additional discomfort because of the complaint.

It is here that I feel it is the duty of the state to step in, no matter in what capacity the state board serves, whether it be to govern or to supervise. I believe all complaints should be investigated. I do know from experience that only a small proportion of the complaints are just and founded on fact, but I also know that the few honest complaints need speedy adjustment, and I feel that the administration should allow free complaint and avoid public scandal.

A heralded official inspection is useless as an investigation of actual conditions, and an inmate during such inspection has little or no chance to state his case to a visiting official. It is true we hear on all sides the depreciation of "pauper evidence." I have found that "pauper evidence" is apt to be as reliable as ordinary evidence, and if the cause be just, even if crudely revealed, still convincing. I most certainly detest investigations of the pyrotechnic variety, because they do more harm than good, frighten the inmates, hamper the superintendent, and end in the usual pail of whitewash, with the abuses still existing. Investigations carried on by volunteer committees, composed of individuals zealous in the desire to stamp out wrong, but ignorant of almshouse inmates or almshouse conditions, knowing little of standards, bring havoc to the administration and at times force open insubordination, a condition that may take years to stamp out and make it all the harder for both inmate and administration. It is wise, then, to leave investigations to the directors or the state.

I don't believe any institution can be rightly managed without suitable rules and regulations, properly enforced, but handled with some degree

of elasticity. I believe that no man or woman inmate should be allowed to become a leader of discontent, and it is the wise superintendent who can see the small cloud on the horizon and prepare for the tornado. It is here the individuality of the official counts, and I have found that the superintendent who in the good American style "kids 'em along" usually averts disaster, rather than the one who by hasty drastic action forces trouble.

All administration should be based on dealings with reasonable inmates, and because many inmates are unreasonable, I have advocated elasticity in enforcing rules. I feel that too often we fail to appreciate fully an inmate's position because we refuse to get into his place and judge conditions from his position.

As long as the inmate population varies in type, as it does in the different states, it is difficult to set a definite standard; only when we all agree upon the types that should rightly form the almshouse family can any true standardization be defined. Nor can it be forgotten that the standard for the small almshouse is much different from that for the large institution, and it is doubtful if one standard can be laid down that will cover the two, except in the fundamentals.

The first problem would be standard types, then standard laws. Are we to continue the almshouse, or are we to establish in its place the infirmary? The drift is toward the latter. As far as I can see the almshouse types of today are (after putting onto the state or county the care of the criminal, the mental defectives, and the child) the sick, chronics, the aged, cases of mild mental defect, cripples and blind unable to earn a living, children awaiting placement, non-producers whose peculiarities prevent self-support, the winter intruder—and of these, eventually, the winter intruder is bound to go. Where most institutions care for one type, the almshouse cares for many, so are its problems multiplied.

There should be uniformity in laws, at least in as far as the following:

Criminals should not be committed to an almshouse.

All inmates should be required to perform labor as far as their ages and physical condition will allow.

Acute alcoholics should be forbidden the almshouse unless its equipment is such as to permit of their being isolated and receiving hospital care.

Children should not be taken for a period exceeding sixty days, and then should be kept separate from other inmates.

Married couples should be allowed the comfort of each other's society during the daytime at least. If groups based on these types and administra-



tion carried out under the provisions of law as outlined above could be combined, standards could be devised.

From the inmate's standpoint he certainly has a just grievance if anyone and everyone who does not just fit in some other place is forced into the inmate family.

It is also true that little attempt is made to reinstate inmates in occupations when self-support can be acquired. Of course, the larger the institution the more easily an individual gets lost and the less is his chance of getting back into an independent position. But it is the large institution which needs proper investigating facilities to determine the feasibility and advisability of discharging. No institution is doing its part unless someone will undertake effort with the individual, and I believe such effort is a measure of economy. To be a success it takes work, and hard work, on the part of an investigator who is willing to forgive an endless number of times and to whom discouragement is an unknown word. Perhaps this is because, as compared with other kinds of dependents, we have considered the average almshouse cases as unpromising, if not hopeless. It is probable that among men admitted for the first time at least one quarter could be assisted to independence and future admission postponed. With women it is different; few women, unless rightly to be considered inmates, apply for admission, and usually their entrance is due to the fact that they have ceased to be earners. And in some cases it is difficult to retain women who, the authorities feel, should not be surrendered from the custodial care furnished in an institution.

The almshouse has suffered from the fact that little attempt has been made at house-cleaning. Had we been as zealous with its inmates as with the dependent families under our care we could, under usual standards, assume that we had done our full duty, but when a case is admitted to the almshouse the investigator who has followed it usually sighs and writes "Finis" on the record, and it is closed.

I have confined myself to the institution, and purposely, because the problem of the farm end belongs to the department of agriculture. I have made many mental notes, however, relative to the farm end of the institution, and I'm bound to say I find myself damning with faint praise the mixing of agriculture and the care of the indoor poor. The decadence of the farm dates back in Massachusetts to the time the insane were turned over to the care of the state; this caused a lack of labor and consequently an increased cost in farm expenses. However, it must be added, in justice to the threefold county institution—that is, the or-

ganization handling the poor, the insane, and petty criminals—that a farm is a necessity and a big factor in practical employment and economical management. But I am swinging to the idea that the present conditions are such that the infirmary is gradually taking the place of the almshouse. This is but natural; the poorfarm succeeded the workhouse, the almshouse or home for the aged succeeded the poorfarm, and now the hospital or infirmary is bound to succeed the almshouse.

#### ECONOMY IN BRITISH WAR HOSPITALS

##### *Immense Savings in Food, Drugs, Dressings, Laundry, Heat, Lighting, Etc., by System and Care*

We are told, on the authority of a special correspondent of the *Daily Chronicle*, that a saving of 2,500,000 pounds (\$12,500,000) has been effected in the military hospitals by Dr. Napier Burnett and a staff of one statistician and one typist, working under Sir Alfred Keogh at Adastral House. This has been accomplished without hampering the medical work or in any way stinting the patients. Dr. Burnett found that no hospital knew its cost in food. Physicians order chicken because of a "bedside tradition," with no notion whatever of the caloric value of chicken. Dr. Burnett therefore began with the kitchen.

"He asked hospitals to inform him (1) what check existed on the stores coming into their cupboards; (2) how these stores were used; (3) what use was made of their waste products—dripping, bones, bread, etc. He then made a table of each hospital of (1) the daily cost of its food; (2) its daily consumption; and (3) its daily caloric value. These inquiries resulted in the most striking discoveries. Some hospitals—notably the Third London General, at Wandsworth—were found to be admirably managed; in others the cost was a prodigious as the waste. In certain hospitals officers were given three times as much meat as the men, although in France the rations are the same. In some hospitals the caloric value of the food was enough to blow the patients to smithereens; in others it was dangerously low. Little or no use was made of cheese. Oatmeal and rice, where used, were in many cases so badly cooked as to be wasted. The care of food was not properly considered. Covers for milk, the use of cold storage, the ventilation of the larder—these things were ignored by the busy doctors absorbed in their healing. Dr. Burnett made his appeal to matrons and nurses. He introduced a system of rivalry—command v. command, hospital v. hospital, ward v. ward. Every month every hospital now knows the quantity of food it consumes and its cost.

"The same careful attention was paid to drugs and dressings, to the laundry, and to heat and lighting. As regards the last item, Dr. Burnett appealed to the nurses for economy on the ground that waste of fuel meant bringing back a thousand miners from the front to hew coal for them. As regards the laundry, his appeal reduced an average number of pieces from 15 per man per week to 10 and 12; in some hospitals as many as 30 pieces per man per week had gone to the wash. There was a saving in drugs and dressings directly nurses understood the need for economy.

"The result of these inquiries has saved the country more than two and a half millions in a single year, and the efficiency of the hospitals has been increased. The soldier's food is better cared for, better cooked, and has a better caloric value."

## LAXATIVE FOOD PREPARATIONS AND THEIR COMPOSITION

### Wheat Brans, Bran Biscuits, Agar-Agar, and Other Laxative Preparations—Analyses of Composition—Enthusiastic Claims of Manufacturers—Often Excessive—Wide Range of Cost of These Preparations

By JOHN PHILLIPS STREET, CHEMIST, CONNECTICUT AGRICULTURAL EXPERIMENT STATION, NEW HAVEN, CONN.

THE advertising columns of our newspapers, our magazines, and even our medical journals would lead the casual reader to the conclusion that to a very large proportion of the American people constipation was a constant menace and annoyance. Perhaps such a conclusion would not be far from correct. The purveyor of medicines, whether he be a plain, ordinary, everyday nostrum faker, or whether he be the more respectable manufacturer of a so-called "ethical" proprietary, has recognized the prevalence of this evil, and the market is flooded with preparations claimed to be effective for its relief. Aside from the mineral oil (liquid paraffin) and phenolphthalein preparations, which most competent authorities class as not only effective, but generally innocuous, hundreds of preparations depending on the action of more or less drastic cathartic or purgative drugs are offered daily to the public. That the habitual use of these cathartics is likely to injure the user is scarcely open to argument.

Many of our food manufacturers have also recognized the American tendency toward constipation, and we find numerous brands offered today to correct it. I have no quarrel with the manufacturers of such preparations, and clearly recognize their possible usefulness. While fresh air, exercise, and less eating to excess would doubtless be the more natural means of combating any but the most stubborn cases of constipation, it is doubtless true that in numerous instances the use of such foods would be followed by benefit, and only in those cases in which digestion was greatly impaired would there be any serious danger from their consumption.

It is obvious to any student of nutrition that the average American dietary contains too great a proportion of concentrated foods. In our choice of foods and in our methods of cooking them we have bent all our energies toward securing the food in as digestible a form as possible. Many of us have actually fallen so low as to depend on the so-called "predigested" foods, asking the manufacturer or chemist to do to their foods what the Almighty intended should be done by our own digestive systems. At any rate, whatever the cause, the diet of most of us contains too much food that is completely digestible and is deficient in the bulk or roughage which every successful cattle-feeder

recognizes is essential to the health and well-being of his farm animals.

At the present time the most popular method of repairing this dietary deficiency is the use of some relatively indigestible substance, such as wheat bran, either alone or in combination with other materials, or a completely indigestible substance, such as agar-agar (Ceylon moss), likewise used either alone or combined with some cereal food. In a few instances fruits, nuts, olive oil, or flaxseed meal are components of these special laxative foods.

It is not my purpose to discuss the merits of any of these groups. That their use in many instances is followed with great success it would be foolish to deny. The purpose of this paper is simply to present the results of my analysis of a number of these preparations, so that the physician, the dietitian, and the consumer may know the composition of the foods he is prescribing or using, and that he may not be misled by specious claims of the manufacturer.

The table contains the analyses of thirty-one of these preparations examined in my laboratory, chiefly within the last three years.

Before discussing their composition, let us examine some specific claims made for certain of these foods.

Bran Biskue.—"Our branniest wafer and has proved to be the delight of bran eaters."

Bran-eata Biscuit.—"An appetizing cereal food . . . combined with sufficient bran to be effective, shaped into biscuit form and baked."

Bran Zos.—"In addition to the outside coat of wheat, rich in phosphates, . . . contains the gluten layer."

Brose.—"Contains 50 percent more bone and nerve-building salts and cellulose than any other food."

Cerag.—"Prepared principally from whole wheat, barley malt, and agar."

Cerena.—Claimed to contain wheat, olive oil, and cotton-seed meal.

Colax.—"Cellulose prepared from Ceylon moss."

Dieto Nut Cereal.—Claimed to be made from whole wheat flour rusks, pine nuts, and peanuts. "Slightly sweetened with Dieto Saxin" (saccharin).

F. B. A. Laxative Health Biscuit.—Claimed to contain flaxseed, bran, and agar-agar.

Fruit Nut Cereal.—"Contains figs, raisins, walnuts, wheat bran, malt, thoroughly dextrinized."

Good Health Biscuit.—"More blood- and bone-making elements than any other food."

Laxa.—"Sterilized wheat bran and Ceylon moss."

Sea Moss Farina.—"Genuine sea moss, toned down



## WHEAT BRAN, BRAN BISCUITS, AND OTHER LAXATIVE FOODS

Date of analysis.	Brand.	Water.	Ash.	Protein. (N X 6.25.)	Fiber.	Nitrogen-free extract.	Fat.	Galactan.	Phytin phosphoric acid.	Calories per 100 gms.
1914	Wheat Bran, Ballard's Obelisk.....	11.45	4.48	17.31	5.56	55.78	5.43	*	*	341
1917	Wheat Bran, Culp's Capitol.....	11.16	5.30	13.38	8.15	57.73	4.28	*	*	323
1914	Wheat Bran, Health Food Co.'s.....	11.57	5.58	14.25	8.19	56.28	4.13	*	*	319
1914	Wheat Bran, Jireb.....	11.08	4.30	16.81	6.33	56.68	4.80	*	*	337
1914	Wheat Bran, Johnson's Educator.....	11.64	6.09	15.38	7.81	54.43	4.65	*	*	321
1914	Wheat Bran, Johnson's Educator (Bran Meal)	11.78	2.88	12.25	3.84	66.49	2.76	0.54	1.15	340
1914	Wheat Bran, Kellogg's.....	9.63	6.03	16.25	8.54	54.31	5.24	*	*	329
1914	Bran Biskue.....	8.50	3.08	12.06	2.23	61.05	13.08	0.22	0.57	410
1917	Bran-eata Biscuit.....	9.83	4.35	9.13	3.56	72.21	0.92	*	*	334
1917	Bran Zos.....	11.85	2.96	13.19	3.84	65.71	2.45	*	*	338
1914	Brose.....	10.13	2.63	14.44	3.13	65.37	4.30	0.68	0.73	358
1917	Cerag.....	9.15	3.56	11.25	1.99	73.15	0.90	*	*	399
1910	Cerena.....	7.19	4.88	27.81	2.40	46.35	11.37	*	0.67 <sup>1</sup>	351
1914	Christian's Laxative Bread.....	9.93	2.78	10.00	1.33	74.58	1.38	0.24	0.36	344
1909	Christian's Laxative Cereal Flakes.....	13.04	1.67	10.37	1.00	72.55	1.37	*	*	361
1914	Colax.....	13.08	2.08	1.13	0.13	82.80	0.78	13.18	*	459
1914	Dietetic Bran Biscuit.....	9.28	4.95	9.94	1.68	69.20	4.95	0.12	0.78 <sup>2</sup>	425
1914	Dieto Nut Cereal.....	5.00	1.95	21.63	1.22	51.82	18.38	*	*	349
1914	Educator Bran Cookies.....	7.12	3.27	8.88	1.50	64.75	14.48	0.09	0.41	355
1915	F. B. A. Laxative Health Biscuit.....	11.13	3.13	6.13	0.68	77.20	1.73	*	*	340
1917	Fruit Nut Cereal.....	7.33	3.15	13.50	2.36	72.45	1.21	*	*	374
1914	Good Health Biscuit (Kellogg).....	10.90	4.18	7.69	1.48	74.57	1.18	0.18	0.00 <sup>3</sup>	374
1914	Health Food Wafers.....	9.70	5.28	10.00	1.40	65.77	7.85	0.24	0.65 <sup>4</sup>	336
1917	India (Digestive) Biscuit.....	8.67	5.02	12.81	5.23	66.03	2.24	*	*	395
1914	Kellogg's Laxative Biscuit.....	9.35	2.95	16.69	2.43	57.78	10.80	0.34	0.33	469
1915	Laxa.....	6.60	5.03	12.38	6.58	66.63	2.78	*	0.31 <sup>5</sup>	342
1914	Mansfield's Agar-Agar Wafers.....	7.93	2.33	7.13	0.75	69.86	12.00	0.13	*	
1914	Oval Digestive Biscuit (H. & P.).....	8.80	2.07	7.75	0.45	64.61	16.32	0.09	*	
1917	Sea Moss Farina.....	15.61	13.56	9.13	1.50	59.93	0.27	*	*	
1915	Uncle Sam Health Food.....	6.25	3.10	21.25	3.98	40.99	24.43	*	*	
1917	Zim.....	13.16	1.96	7.44	1.51	74.23	1.70	*	*	

\*Not determined.

<sup>1</sup>Total phosphoric acid, 2.32 percent.<sup>2</sup>Total phosphoric acid, 1.21 percent.<sup>3</sup>Total phosphoric acid, 0.52 percent.<sup>4</sup>Total phosphoric acid, 0.96 percent.<sup>5</sup>Total phosphoric acid, 2.41 percent, with considerable lime and a trace of iron.

with a cereal blending. The fragrance of the sea breeze with its tonic properties."

Uncle Sam Health Food.—"Flaxseed and whole wheat, flavored with salt and celery."

Zim.—"Popcorn, flaked corn, bran, and hominy."

A reading of the foregoing claims shows considerable enthusiasm, often misplaced, on the part of the manufacturer. In some cases there is downright misrepresentation. We will not attempt to discuss these preparations individually. The table gives the customary data as to the composition of each, and in several instances galactan and phytin phosphoric acid are also reported. These two determinations need a word of explanation. Agar-agar, Ceylon moss, and similar substances contain the carbohydrate galactan. The absence of this ingredient in a mixture, therefore, will show that no agar-agar is present. Similarly it has been shown that a considerable part of the phosphoric acid of wheat bran exists in organic form as phytin. The amount of phytin phosphoric acid present, therefore, would measure in some degree the proportion of wheat bran present. Wheat bran itself contains about .40 percent of galactan as well, so that a figure much in excess of this would suggest the use of some other galactan-yielding material, such as agar-agar. It is to be regretted that these determinations were not made in all the samples, but for various reasons this was not done at the time they were examined.

The following brands listed certainly contain agar-agar or a similar substance: Cerag, Colax, F.

B. A. Laxative Health Biscuit, Laxa, Mansfield's Agar-Agar Wafers, and Sea Moss Farina. The amount of agar-agar in these ranges from nearly 100 percent in Colax to less than 1 percent in Mansfield's Agar-Agar Wafers.

Aside from those brands whose names clearly indicate the presence of wheat bran, the following show bran to be a constituent: Brose, Cerena, Christian's Laxative Bread, Health Food Wafers, Kellogg's Laxative Biscuit, Laxa, and Oval Digestive Biscuit.

The claim for "bone-making" elements in any food generally rests on the amount of phosphoric acid present, and yet one of the brands particularly stressing this claim contained only .52 percent, less than any of the other brands tested.

The seven samples of wheat bran show a considerable range in composition. All were clean, however, and well suited for human food. The fiber and the organic phosphorus of the bran are the chief ingredients which give it its anti-constipating properties. In the samples analyzed the ash ranged from 2.88 to 6.09 percent and the fiber from 3.84 to 8.54 percent. Other things being equal, it would seem that the brands showing the highest percentages of these ingredients would be the most effective in preventing constipation.

The majority of these laxative preparations are relatively expensive. Owing to the present wide fluctuation in the prices of cereal products, no prices are given in the table, as the analyses extend over a period of eight years. It may be said,



however, that at the time of the analysis the cost of these preparations ranged from 8 cents to \$2.76 per pound, and it is by no means certain that the higher-priced brands are any more effective than

the cheaper ones. The wheat brans show a range in cost from 6.5 to 20.5 cents per pound, showing either the one to be an extremely reasonable purchase or the other a grossly extravagant one.

### CINCINNATI'S SUCCESSFUL ANTITUBERCULOSIS CAMPAIGN

#### **Team-Work the Essential Feature—Cooperation With the Municipal Tuberculosis Sanatorium and Support of Tuberculosis Dispensary and Summer Camp for Children—Valuable Activities**

BY COURTENAY DINWIDDIE, CINCINNATI, SUPERINTENDENT OF THE CINCINNATI ANTI-TUBERCULOSIS LEAGUE

**T**HE city of Cincinnati, a little over two years ago, adopted a program of action for reducing tuberculosis which has been characterized by Mr. Philip P. Jacobs, assistant secretary of the National Association for the Study and Prevention of Tuberculosis, as "unique in its breadth of vision and its definiteness of purpose." I do not believe that any other city can show such a splendid record of team-work as Cincinnati in carrying out this program.

Each society for the prevention of tuberculosis, while following certain broad lines of attack upon the problem, has developed more or less unique features, adapted to peculiar needs of the community which it serves, or expressive of the special talents of those in charge of the local work. The work of the Cincinnati Anti-Tuberculosis League is inspired and controlled by the firm belief that, if the tuberculosis campaign is to have the fullest measure of success, not only every health and social service agency, but also every citizen, must be definitely enlisted in the fight.

#### MUNICIPAL TUBERCULOSIS COMMITTEE

The "Cincinnati Plan" for tuberculosis work is typified in the organization and work of an advisory committee for the Anti-Tuberculosis League, known as the Municipal Tuberculosis Committee. It has been asked whether that committee does not duplicate the work of the league. It does not. The Municipal Tuberculosis Committee represents all of the public departments and private agencies directly interested in health and social service work. Its services are advisory and cooperative in nature. It meets from time to time for the purpose of receiving suggestions from the Anti-Tuberculosis League and other agencies and of formulating plans for more thorough control and prevention of tuberculosis, conceived along broad lines. In this way practically all organized civic agencies of the city are in complete harmony as to what are the next steps to be taken in the antituberculosis fight, the relative importance of each, and which are the proper agencies for carrying them out. The value of this

complete agreement and of the team-work secured through it is inestimable.

An ambitious program was adopted by the Municipal Tuberculosis Committee in 1915. Most of the items in this program have been carried into effect or are under way at the present time. Some of those which are more important might be briefly mentioned.

#### SOME RESULTS OF TEAM-WORK

The bringing of the national social unit plan to Cincinnati is regarded by members of the Municipal Tuberculosis Committee as the most important achievement resulting from the 1915 program.

This plan was secured for Cincinnati in spite of the competition of fifteen other cities and the virtual decision of the officials of the national social unit organization to conduct the experiment in Washington. The cooperation of all agencies through the Municipal Tuberculosis Committee, and the effective preliminary work already done for the Cincinnati health center plan, were among the principal determining factors in the selection of Cincinnati. The distinctive features of the social unit plan, which differentiate it from health center plans, may be summed up as follows:

1. It provides the most definite, practical working program which, so far as I know, has yet been proposed for securing not just the cooperation of the people to be benefited by intensive health work, but their actual participation, in a democratic way, through block and neighborhood organization, in the study and solution of their own needs.

2. It provides the most definite working program, which, so far as I know, has yet been proposed for group organization, by which the services of skilled groups, such as doctors, nurses, statisticians, social workers, etc., will be readily available for greater efficiency in health work, without imposing the opinions of one group arbitrarily upon an affiliated group, whether in the same field or another field of work. This group

organization will be on a national, city, and district basis.

3. It squarely faces the problem of the socialization of medicine, and, instead of developing a system whereby the physicians of the social unit will be deprived of their practice without consultation, definitely takes them into the plan on a thoroughly democratic basis.

4. As a concrete means of securing the participation of residents of a district in the social work, and at the same time of retaining the value of the services of trained specialists, it provides for a system of what might be termed general practitioners and specialists in social work. In other words, residents of the neighborhood, democratically selected as local friendly visitors, are the general practitioners who will be given courses of instruction in community service, and the physicians, nurses, and social workers are the specialists who will be called in whenever needed.

Another achievement of which the antituberculosis workers of Cincinnati are proud is the passage by the 1917 Ohio Legislature of a bill creating a health insurance commission, with an appropriation of \$25,000, to study the subject for two years and report at the next session of the legislature. The plan for this commission was fathered by the Municipal Tuberculosis Committee in its 1915 program, and the Anti-Tuberculosis League conducted a state-wide campaign of information on the subject.

Still another definite goal set for itself by the committee was the securing of a substantial increase in the appropriation for the municipal tuberculosis sanatorium. In view of Cincinnati's being hampered financially, together with all other Ohio cities, by too restrictive legislation, this seemed a hopeless task. It was accomplished, however, after a city-wide campaign of information, by the generous action of the Hamilton County Commissioners, in appropriating \$25,000 to be added to the city's budget for the maintenance of the patients at the sanatorium.

Another vision which the committee had was an increase in the capacity of the league's summer camp for children at Kroger Hills. Mr. B. H. Kroger, who donated the camp site and the original building, noted the benefits to the children with keen interest, and generously gave an additional building, increasing the capacity of the camp to 135.

In the belief that bad housing conditions are a vital factor in the spread of tuberculosis, whatever science may determine as to whether they are a direct or contributing cause, the improvement of such conditions was one of the aims of the program. A special study of housing conditions

was made in connection with the survey of tuberculosis by the United States Public Health Service, at the request of the league and the health department. The formation of the Cincinnati Better Housing League, which has been actively at work for nearly a year, was greatly aided by the presentation of the results of this study.

It may be seen from the foregoing that those working for the reduction of tuberculosis in Cincinnati are very decidedly of the opinion that, to be effective, such a campaign must aim at prevention as well as cure.

#### RELATION OF THE LEAGUE TO THE MUNICIPAL TUBERCULOSIS SANATORIUM

I doubt whether any city can show closer cooperation between a private antituberculosis society and a city sanatorium. The Anti-Tuberculosis League, to its regret, still conducts the city's only tuberculosis dispensary, because the city is as yet unable, financially, to take this over. This dispensary is the clearing house for all admissions to the sanatorium. A report on home conditions accompanies the patient, and the league's field nurses keep in touch with home conditions during the patient's stay at the sanatorium, and, being notified promptly of his discharge or prospective discharge, at once follow him up to see that the benefit of the sanatorium care is not lost.

Five years ago the league employed a social service nurse to be a neighbor and friend to all of the patients at the sanatorium, and to connect its work directly with that of the league. As an aid to her in providing entertainments, various comforts, and attractions for the patients, a hospital social service committee was formed three years ago, and has done much to make the patients' stay at the sanatorium more pleasant. Two of its most recent deeds have been the purchase of a moving picture machine, through the generosity of one of its members representing the Cincinnati agents of the Metropolitan Life Insurance Company, and the construction of a wading pool for the children.

The work of the social service nurse has now been taken over by the city, and the league for the past eighteen months has employed a handicraft teacher to teach the patients various forms of light employment, such as basket-weaving, the making of useful brass ornaments, such as paper knives, trays, etc., embroidery for the women, etc. During 1916 there were 118 patients at work, an average of seventeen working each day, and over \$500 worth of articles made by them were sold, the proceeds being returned to them.

The ever-present problem of finding suitable employment for convalescent and arrested cases of tuberculosis was one of the perplexing ques-



tions for which the Municipal Tuberculosis Committee attempted to find a solution. One of the measures advocated was the employment by the State-City Labor Exchange of a special agent for finding positions for such patients. Through the valuable cooperation of the Associated Charities, a special study of this subject was made and a worker assigned to the task of finding positions for handicaps during the experimental period. This work is now being carried on by the State-City Labor Exchange. The results have been encouraging, but it is too early to give a definite opinion as to its ultimate success. Another thing which was considered necessary in this program of employment was the organization of some special form or forms of industry, which should supply temporary employment to tuberculous patients while suitable and more permanent positions are being found for them. This is one of the plans to be taken up next.

#### SUMMER CAMPS FOR CHILDREN

The work of the league in its preventorium or summer camp for children has been somewhat unique in several ways. It is an attempt to make, with the complete cooperation of the open-air schools of the city, a definite all-the-year-around program of outdoors and fresh air for children between the ages of 5 and 15 who are predisposed to tuberculosis. It has little or no relation to the plan of fresh-air outings for one or two weeks, which is in effect in some cities. It is an outdoor camp with as little institutional ceremony and routine as possible; vegetables from its own garden and plenty of good food as a complement to the fresh air and sunshine. On the other hand, it is in charge of a trained nurse, the children are visited frequently by a physician, a rest period is enforced, and everything possible is done to secure the best results. The 184 children made an average gain of  $3\frac{3}{4}$  pounds during their stay at the camp last summer, which averaged 49 days. The advantages of prolonged stay at the camp are easily seen in the following percentages of gain: for 98 children staying from 6 to 10 weeks, 8.02%; 36 children staying from 4 to 6 weeks, 4.96%; 25 children staying 2 to 4 weeks, 4.37%; 10 children staying 1 to 2 weeks, 1.22%.

#### EDUCATIONAL WORK

Mr. Philip P. Jacobs of the National Association for the Study and Prevention of Tuberculosis has called the educational work of the league "carefully planned and admirably executed" and "well worthy of imitation by many other cities." It has followed three general principles: (1) to suit the method of approach and personality of a

lecturer to those who are to be reached; (2) to use varied forms of educational devices, especially those which prove to be most popular; and (3) to follow up educational work done so that its effect is not lost. In charge of its lectures, exhibits, etc., for working men and women, it has placed a man of twenty years' experience in factory work, who has the sympathy and the cooperation of all with whom he deals. In charge of its work of lecturing to school children, mothers' clubs, etc., is a trained nurse of long experience with children, and it has a lecture staff of thirty volunteers, upon whom it may call for special lectures on special subjects.

The educational campaign includes novel features each year. In 1916 a corps of 700 workers, of whom 400 were boy scouts, under the supervision of the league, painted on the leading street corners and at frequent intervals on many of the sidewalks, the sign, "Don't Spit on Sidewalks." This was done one night without preliminary announcement, and was followed up the next day by wide publicity in the papers, the distribution of special literature on spitting throughout all the schools, and an active campaign by the health department for the arrest of persons found spitting on sidewalks. Moving pictures and other special methods of reaching the public are freely used. A total of 112,455 persons were thus reached by various methods last year.

One branch of its work in which the league has had unusual success has been that of suppressing tuberculosis frauds. In 1915, in particular, there was a large crop of these organized efforts to bleed sufferers of tuberculosis. Following are the types of such frauds which were suppressed that year: (1) a physician claiming to have a "cure," the revocation of whose license was secured; (2) a resident of Cincinnati, who was a firm and mistaken believer in the value of a certain remedy which he had prepared, whom it was finally necessary to prosecute in court; he was fined and agreed to discontinue his practice; (3) a young man living in Columbus, Ohio, who advertised in the Cincinnati papers a "cure" which he called "Tubertabs"; he was made to realize the error of his practices and to discontinue them; (4) a Chicago physician, who advertised in Cincinnati papers, and who discontinued such advertisements after presentation of evidence concerning him to the United States postal authorities; (5) a so-called "chemical company" of Cincinnati, which, through the cooperation of the Attorney-General of Ohio, was made to give a written pledge to discontinue its practices; (6) agents for the Children's National Society, who withdrew from this city after information concerning it was sub-



mitted to the city safety director, who issued a warning to these agents; (7) a nationally organized concern, which conducts a wide advertising campaign, the sale of whose remedy was largely reduced in this city through the cooperation of fourteen of the city's leading drug stores in refusing to handle it.

#### A NEW PROGRAM

Believing that an organization which is worthy to live should be blazing new trails, the Municipal Tuberculosis Committee, on April 18, 1917, con-

sidered a list of recommendations of the Anti-Tuberculosis League, and adopted a new and far-reaching program for the relief and control of tuberculosis. This program also is based upon the conviction that the time has come for the adoption of real measures of control, and that the appalling increase in France of tuberculosis resulting from the war makes it imperative that proper steps should be taken at once to prevent similar conditions occurring in this country, and provides an unanswerable argument for measures that shall be really effective.

### CAFETERIA SERVICE FOR TUBERCULOSIS PATIENTS

#### Better Service to Ambulatory Patients by Cafeteria System—Saving in Cost Through Elimination of Waste—Change Popular With Patients

BY HENRY D. CHADWICK, M. D., SUPERINTENDENT WESTFIELD STATE SANATORIUM, WESTFIELD, MASS., WITH THE COLLABORATION OF HERBERT W. SMITH, STEWARD OF THE SANATORIUM

IN December, 1913, Dr. Walter Bailey, chairman of the Massachusetts Board of Trustees for Hospitals for Consumptives, suggested to the superintendents of the four sanatoriums that they consider the proposition of cafeteria service for the patients in their institutions. Each of the superintendents at that time, of whom I was one, believed that the apparent disadvantages of the plan were so many, and especially that so much confusion and delay would result from individual self-service that it was not practicable for tuberculosis patients. We so reported to the trustees and the matter was dropped.

About a year later, in the December, 1914, issue of THE MODERN HOSPITAL, I chanced to read the article by Miss Mary L. Keith, superintendent of the Rochester General Hospital, describing a self-service plan in successful operation for the employees of that institution. I was much impressed with its advantages as stated by her, and felt that it would be a great improvement over our waiter service in the help's dining room.

We had but one waiter for about forty employees, which was not sufficient for quiet and orderly service, but as the employees came to meals at slightly different intervals the work could be done by one person. There was more or less complaint of the food and delay in service. These were justified often, because the food when it reached the individuals was often cold and unappetizing. Frequently it was spoiled by delay in serving. This could not be remedied, because we could not afford to hire the number of waiters necessary for quick service.

The board of trustees approved of a trial of the plan, and in April, 1915, the necessary equipment

was installed to care for the employees on the self-service basis. There was very little opposition to the change, and the few persons who objected to going to the counter were soon won over by the obvious advantages that they were quick to perceive. The food was always hot, the service was rapid, and the opportunity for choice was greatly appreciated.

This plan worked so satisfactorily in that dining room that it was decided to extend its advantages to the adult ambulatory patients, of whom there were about one hundred and twenty-five. The partition separating the patients' dining room and the kitchen was cut through to provide a place for a counter, back of which the cafeteria equipment was installed. The carpenter work and necessary equipment cost approximately two thousand dollars. The oak dining tables were cut down in size and Carrara glass cemented to the old wood tops. Discontinuing the table cloths proved a sanitary as well as an economical measure.

This cafeteria was opened March 21, 1916. It met with favor from the first, and a short time after its installation the patients voluntarily signed a statement commending the new service and approving the change. During the sixteen months it has been in operation no complaint of the food has been made; on the contrary, the patients, realizing the prevailing high cost of supplies, have stated that they do not see how we can provide so good a bill of fare. At the present prices this costs us approximately 34 cents per consumer.

The following is a copy of the week's menu served July 24 to July 30, 1917, inclusive:

WESTFIELD STATE SANATORIUM, JULY 28 TO JULY 30, 1917

## SATURDAY

*Breakfast*

Farinose.  
Samp.  
Hamburg steak (plain).  
Hamburg steak (onions).  
Fried ham.  
Boiled rice.  
Corn bread.  
Coffee, milk.

*Dinner*

Veal pie (family style).  
Braised beef.  
Boiled potatoes.  
Mashed potatoes.

Wax beans.  
Swiss chard.  
Bread and butter pudding.  
Old-fashioned rice pudding.  
Milk.

*Supper*

Krumbles.  
Corn flakes.  
Baked beans.  
Brown bread.  
Escalloped tomatoes.  
Frosted cup cakes.  
Iced tea.  
Milk.

## SUNDAY

*Breakfast*

Fruit.  
Mother's wheat hearts.  
Bacon.  
Dropped eggs on toast.  
Fried potatoes.  
Coffee, milk.

*Dinner*

Vegetables.  
Sirloin steak.  
Roast stuffed veal.  
French fried potatoes.  
O'Brien potatoes.  
Boiled onions.  
Creamed carrots.

Finger rolls.  
Orange sherbet.  
Marble cake.  
Milk.

*Supper*

Grape nuts.  
Force.  
Egg salad.  
Baked macaroni (plain).  
Baked macaroni (onion).  
Pound cake.  
Peach sauce.  
Iced tea.  
Milk.

## MONDAY

*Breakfast*

Pettijohn.  
Saxon food.  
Wheat griddles.  
Maple syrup.  
Scrambled eggs.  
Rye muffins.  
Coffee, milk.

*Dinner*

Beef stew and dumplings.  
Roast lamb.  
Boiled potatoes.  
Mashed potatoes.

Cabbage.  
Milk.  
Buttered beets.  
Lemon jelly.  
Coffee jelly.  
Milk.

*Supper*

Puffed wheat.  
Corn flakes.  
Meat hash.  
French toast.  
Currant jelly.  
Currant jelly roll.  
Cocoanut jelly roll.

This is an average week, and shows the variety of food and the opportunity for choice which is given a patient. Besides being able to choose between two kinds of meat, a patient can ask for that which is rare, medium, or well done. Eggs, for instance, can be served soft, medium, or hard, as with the automatic egg-boiler this is a very simple matter. The patients also have the privilege of having eggs cooked in various ways when the breakfast menu is not to their liking, although they are not on the bill of fare. This has been a feature that has pleased more than anything else and has not added much labor to the kitchen force; neither has it resulted in the preparation of an excess of food, as experience soon showed the relative popularity of the various articles of diet, and the chef prepares the amounts accordingly; nor has it increased the cost of the dietary.

The care taken in selecting meats, canned goods of all kinds, butter, eggs, etc., has been a big factor in reducing the table waste. The value of flavor or palatability is an important factor and

must have careful consideration in the preparation of the food. Furthermore, it is an economical measure as well, because, when good food is attractively displayed and the quantity served in suitable portions to the individual, nearly if not all of it will be eaten and the waste reduced to the minimum. Moderate-sized portions are served, and the patients may come back for second or third helpings if they desire. We want them to leave clean plates and therefore impress upon them the necessity of taking only as much as can be eaten. In many instances the highest-priced grades of canned goods, groceries, or meats have been found to be the least expensive because, there being little or no waste, a smaller quantity is prepared. We have been able to popularize such articles of diet as hash, beef stew, minced meat, and Hamburg steak by preparing them from a good quality of meat, well seasoned, and placed hot on the counter, where the dishes are displayed in as tempting a manner as possible for the patients' inspection. These cheaper foods will often be selected instead of lamb chops or some other meat that costs much more. A frequent complaint made in institutions is the lack of variety of food. The cafeteria plan solved this problem to the satisfaction of all. The individual sees the food displayed in a tempting manner; it is steaming hot and attractive; there are two or more kinds to choose from, and the variety appeals and satisfies.

The price the patient pays for these advantages is the little effort he has to make in carrying a tray to the counter, looking first at the menu and then at the displayed food, deciding what he wants, and taking the filled tray to his table. Service is immediate, and the food is hot as from the oven or broiler and at its best. The patients come from different wards, about thirty at a time, one group following another at about five-minute intervals. We can serve about six people a minute, so there is but little time for any individual to stand waiting in line.

We expected to save some money by discontinuing waiter service, but such is not the case. Only one less man is employed, and we have found it necessary to pay higher wages and get more intelligent employees. The economy has been in the saving of food and has far exceeded expectations, not by curtailing or limiting the amount consumed, but by the reduction of the table waste.

During our financial year of 1916, eight months of which was under cafeteria service, we expended \$2,700 less for food than in the preceding year. Close watch of the amount of food cooked for each meal is absolutely essential to the success of the plan. It is very easy for the kitchen to increase its waste by the preparation of too much food if



watchfulness is not constantly maintained. For this purpose it is necessary that the steward spend most of his time in the kitchen supervising the preparation and the serving of the meals. At first, because of the two meats, several vegetables, and two desserts, it was hard to estimate the needed amount with accuracy. A brief experience, however, overcame this difficulty and the chef was soon able to judge very closely the quantity that would be called for at a given meal of any article on the dietary. Steaks, chops, or any broiled meats are cut direct from the loins and cooked as needed. No more is cut off or cooked than is ordered. Canned vegetables, unopened, are immersed in boiling water and kept there until needed. Any cans remaining after the meal are taken out, cooled, and returned to stock without in any way damaging their contents.

"The proof of the pudding is in the eating" is a very old saying. We feel that the cafeteria serving has demonstrated its value. It has satisfied the patients and gained their good will. They realize that in these days of high prices they are getting better food than it would be possible for them to buy outside. They have cooperated with us in many ways. When some of the staple foods like potatoes have been so high that it was necessary to serve them less frequently, the patients have taken the substitute without complaint. Although the table waste decreased a great deal during the first year of cafeteria service, which ended the last of March, I was not satisfied, and called the attention of the patients to the considerable amount of bread, milk, and other expensive food left on the table. They responded promptly to the suggestions made, and there was a further cutting down of the waste fully 20 percent during the following two months, and the irreducible minimum has not yet been reached. The brief statement given in Table I, comparing the results obtained during the past three years, will show that our claims for economy are based on facts:

TABLE I. COMPARISON OF RESULTS IN PAST THREE YEARS

	1914	1915	1916
Average number of patients.....	234.57	258.81	263.78
Raw food cost per patient.....	\$2.77	\$2.436	\$2.188
Cost of meats.....	\$17,734.77	\$15,460.16	\$11,479.23
Cost of butter.....	3,218.66	2,967.36	2,594.15
Cost of cereals.....	318.15	406.41	684.57
Cost of sugar.....	932.20	1,323.88	1,578.55
Total food cost.....	\$33,870.89	\$32,876.77	\$30,100.05
Increase number of patients, 1914 to 1916.....		12.4 percent	
Decrease in food cost, 1914 to 1916.....		11.13 percent	

## MEAT REQUISITIONS

	Pounds	Average weekly
Dec. 1, 1915, to Feb. 28, 1916.....	27,841	2,165.
April 25 to July 17, 1916.....	13,874	1,378.4 (cafeteria)
Jan. 2 to Feb. 11, 1917.....	7,878	1,575.4 (cafeteria)
April 23 to July 22, 1917.....	17,685	1,360. (cafeteria)

The year 1914 was under the usual plan of waiter service. In 1915 the patients had waiter service all the year, the employees waiter service

four months and cafeteria service eight months. In 1916 the employees continued under the cafeteria service and the adult patients had the same for eight months of the year, four months being under waiter service.

The staff and nurses and the children patients, of whom there are seventy, have waiter service, but their dining rooms adjoin the two cafeterias where the food is obtained. This concentrates all our dining room service as much as possible.

Notwithstanding the increased cost of all supplies, we were able to decrease our food cost 6.8 percent for our financial year ending December 1, 1916, as compared with the preceding year. The elimination of waste made possible by the cafeteria service is responsible for this favorable showing. Excessive waste may be due, first, to a poor quality of supplies; second, to unpalatable food caused by poor cooking or lack of good seasoning; third, to poor service. Many times food is said to be of poor quality in hospitals and institutions, when the facts are that the food was good, but had been spoiled by the slow service from the kitchen to the individual.

Table II shows what we have accomplished in saving waste during the past two years. It represents all waste, including liquids, except water and fruit skins, from the patients' and employees' tables and from the trays served in the wards, the total number of consumers being 345. The kitchen refuse, such as vegetable parings and bones, should be distinguished from edible waste, and for that reason we do not keep a record of its weight. The constant supervision of the steward in the kitchen, and the cooperation of the chef is a check against its becoming excessive.

TABLE II. ELIMINATION OF WASTE UNDER CAFETERIA SERVICE

	Monthly total, pounds	Daily average, pounds
1915		
June.....	5,247.	174.9
July.....	5,735.	185.
August.....	5,674.5	183.
September.....	5,543.	184.7
October.....	5,909.5	190.6
November.....	5,919.5	197.3
December.....	6,048.	195.
1916		
January.....	7,118.5	229.6
February.....	5,697.	196.4
*March.....	5,750.	185.4
	58,642.	
April.....	3,962.5	132.
May.....	3,741.	120.6
June.....	3,422.	114.1
July.....	3,553.5	114.6
August.....	4,064.	131.1
September.....	3,608.	120.2
October.....	3,686.5	118.9
November.....	3,586.5	119.5
December.....	3,606.	116.3
1917		
January.....	3,697.	119.3
February.....	3,337.	119.1
March.....	3,459.	116.6
April.....	2,925.	97.5
May.....	2,676.5	86.3
June.....	2,511.	83.7
July.....	2,487.	80.2
	54,322.5	

Decrease in waste since March, 1916, 56.7 percent.

\*Cafeteria service installed for patients March 21, 1916.

### A WELL-PLANNED COUNTY TUBERCULOSIS HOSPITAL

#### Jasper County, Missouri, Provides Modern Accommodations for Tuberculosis Patients at Moderate Cost—Some Special Features—Avoidance of Infection in Handling of Food

BY RUTH K. CUMMINGS, SECRETARY JASPER COUNTY BOARD OF TUBERCULOSIS HOSPITAL COMMISSIONERS, WEBB CITY, MO.

THIS hospital is situated one and one-half miles northwest of Webb City, Mo., on a forty-acre tract of land on a high elevation fronting south. It is designed primarily for advanced cases of tuberculosis and is strictly a hospital for the sick, with modern and permanent accommodations for the patients with incipient tuberculosis, and convalescents.

The foundation wall is rubble stone, 18 inches thick, faced with pitch face ashlar above the grade line. The superstructure is faced with a dark red vitrified brick backed up with hollow tile with a waterproof mortar joint between the face brick and hollow tile to obviate the dampness following the cement mortar joint to the inside face

rooms. This large waiting room is also intended to be used for midweek evening meetings.

A veranda 12 feet wide extends across the central portion, at each end of which are the patients' entrances to their respective sitting or reading rooms. On each side of the main entrance the veranda has a cover 40 feet long and 14 feet wide, giving an appearance not unlike a pergola.

This cover stands away from the building about 2 feet, and about 2 feet below the top of the front windows, thus admitting an abundance of sunlight to the private bedrooms on the first story. The windows in these front bedrooms extending to the floor are "three-run" sash windows 3 feet 6 inches wide, and, by raising the two lower



Fig. 1. Jasper County Tuberculosis Hospital, Rose & Peterson, architects.

of the wall. All walls are laid in Portland cement mortar, dampproofed. The floors are reinforced concrete, with resilient composition floors in the private rooms, and a smooth-finished cement floor, painted, in the open-air wards. The heating plant and fuel rooms are enclosed with masonry walls, and the other partitions are of a slow-burning, fire-retarding material. The roof is composition supported on reinforced concrete, and over the roof proper is an extra heavy cap sheet to protect the roofing composition.

The plan of the building is crescent shape, and the center axis line is directly north and south. The peculiar shape of the building allows the maximum amount of sunlight in each room. The utility rooms are on the north side of the building.

The main entrance is in the center into a large waiting room directly connected with the main office, superintendent's office, and the examination

sashes even with the bottom of the upper sash, the beds may be rolled out on the veranda.

The wings at each end of the building contain the open-air wards and dressing rooms. Each ward is intended to accommodate sixteen patients and is provided with a common dressing room in which are sixteen private compartments, each containing a steel locker, in which each patient will keep his clothing, toilet articles, etc.; each dressing room also contains two water-closets, one shower, three basins, and one dental lavatory.

Each open-air ward is arranged to obviate drafts on the beds without impediments to the free circulation of air at all times. They are also provided with two rooms in which the sick may be cared for without disturbing any of the other patients.

Each private room and all open-air wards are provided with a modern silent signal system.



At each end of the building, on each floor, is a utility room provided with a modern bedpan cleaner, pan racks, etc., a large blanket room furnished with heat to keep the blankets warm for immediate use, and a linen room for daily supplies.

On each floor is a diet kitchen served with a

turned to the dish-warmer in the diet kitchen. In the rear portion of the building, on the first floor, at the west side, are located the examination, nose and throat, laboratory, and operating rooms. On the east side is the head nurses' dining room and sitting room, which opens directly on to a veranda under which is the entrance for all kitchen sup-

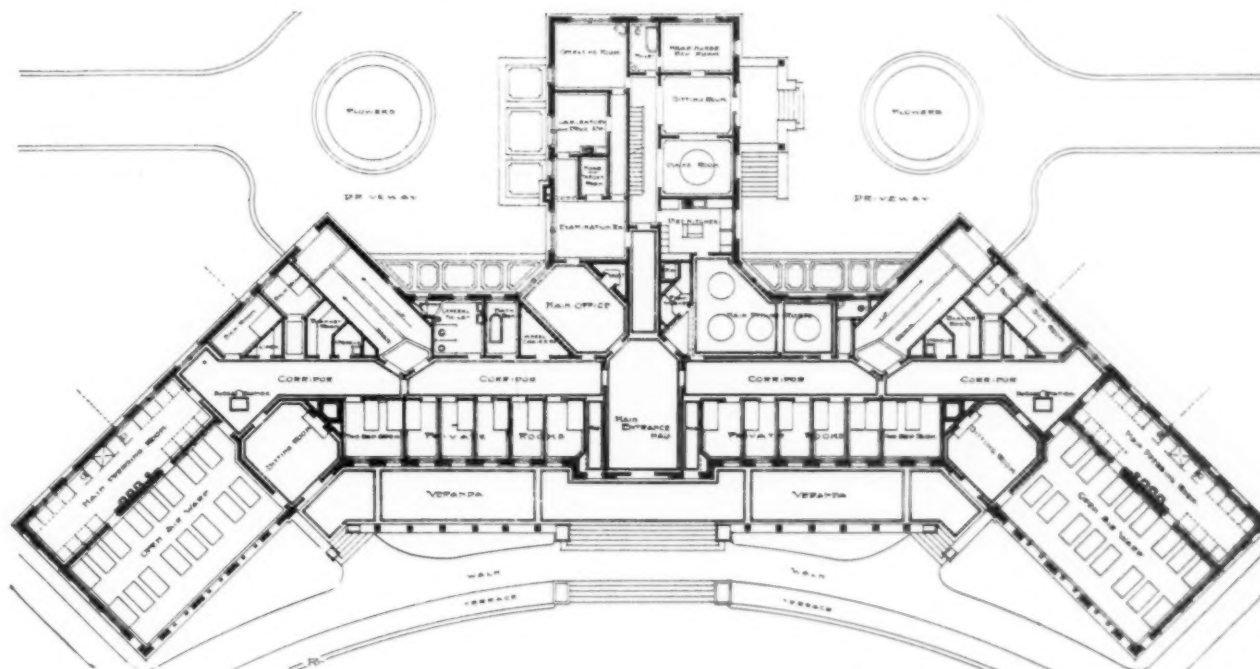


Fig. 2. First floor plan of the Jasper County Tuberculosis Hospital.

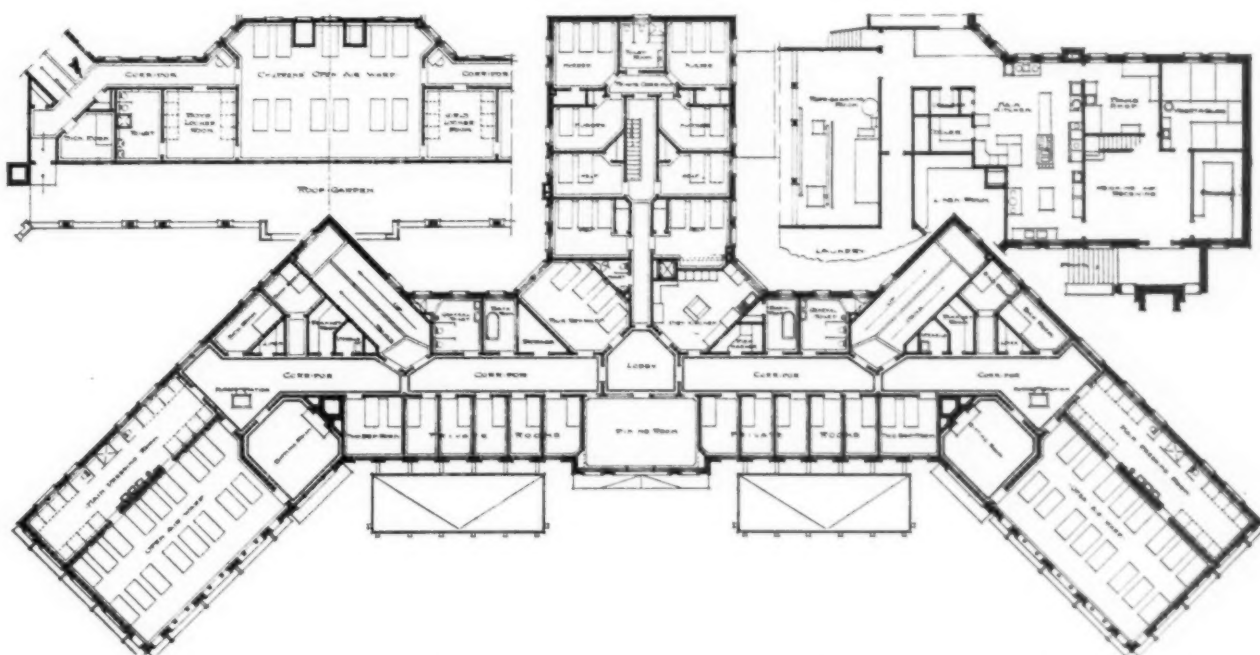


Fig. 3. Second floor plan of the Jasper County Tuberculosis Hospital, with basement plan on the upper right and third floor plan on the upper left.

dumbwaiter from the main kitchen, and each has, in a separate compartment, a modern sterilizing dish-washer. The food is served the patients directly from each diet kitchen, but the trays and dishes are returned to the dish-washing room, scrapped, washed, and sterilized before being re-

plies. The first floor is connected with the second floor with a stairway, but all floors in the main front portion are connected with easy inclines from basement to roof.

On the third floor is located the children's open-air ward and class room, on each side of which

are sick rooms, locker rooms, and toilet rooms to accommodate sixteen children. Immediately in front of the children's ward, extending the full length of the central portion, is a pergola with a cover to insure shade and shelter.

The entire roof may be used by the children for games.

In the basement is the vacuum steam heating plant and high-pressure steam boiler for sterilizing purposes, and vacuum cleaning apparatus, a complete laundry plant, consisting of two washers, an extractor, flat-work ironer, dry room, press, and American sterilizer, through which all soiled linen and clothes go before entering the laundry room proper; also a complete refrigerating plant with a capacity of six tons of ice per twenty-four hours, which will make all the ice required for the ice-cream freezer, packs, etc., but the large cooler and diet kitchen refrigerators will be cooled by coils containing circulating brine. The drinking water will be cooled in the same manner, and a small pump will keep the ice-cold water circulating to each drinking fountain on each floor. A complete kitchen is provided with an 8-foot range, steam cooker and stock kettle, steam and cook's tables, egg-cookers, three-battery coffee urn, ice-crusher and cream-freezer, dish-washer, vegetable sinks, etc. In connection with the main kitchen is a bake shop containing an oven, proof box, dough trough, baker's table and sink. A large room is also provided in which to receive and weigh the supplies, and store groceries and vegetables.

A special and important feature regarding the supplies and kitchen is that all supplies are received and all food is cooked and sent to each diet kitchen; all trays are served and set on the racks, and not until they have passed out of each diet kitchen are they exposed where any tuberculous inmate has been or is allowed. The dishes are then cleaned and sterilized in the sterilizing apparatus and passed back to the diet kitchen by a different route from that by which they came out.

In the basement at the foot of the incline and just inside of the west grade entrance is located an incinerator in which not only all garbage may be consumed, but also all sputum cups or boxes may be destroyed.

There is also conveniently located in this department a room into which a bed may be rolled and fumigated. It is also connected with the large vent stack so that the fumes may be quickly carried away.

Close to the side entrance door is the morgue, which is arranged for six stretchers and is directly connected with a ventilating flue, and at each end of the main building are two larger

rooms with an area of approximately 2,250 square feet, which may be used as recreation or work rooms for patients with incipient cases.

At each end of the building is a nurses' station provided with a telephone, in front of which will be the signal system pilot light and from which all door signals may be seen; through the plate-glass panels in the doors direct supervision of the sitting room, dressing room, and open-air wards may be exercised without the nurse leaving the desk.

Beds for 117 patients and 21 nurses and help are shown on the plans. If the dining room shown on the second floor is used as a ward, 6 more patients may be accommodated, making a normal capacity of 123 beds. If the nurses should be housed in a detached building, using the 20 beds shown in the rear, 143 patients could be accommodated.

The building proper, including the heating and high-pressure steam plant, refrigerating plant, laundry and kitchen equipment, cooler and refrigerators, and architect's fees, cost \$85,000. This is approximately 24 cents per cubic foot and \$690 per bed normal capacity, or \$595 per bed possible capacity. Under normal conditions of the market, for \$25,000, the capacity may be increased to accommodate 100 more incipient or ambulatory patients, who would, owing to the present arrangement and locations of the utility rooms, nurses' station, etc., receive the same accommodations and protection from fire as those in the present building. This would make the cost per bed \$500 normal capacity or \$450 possible capacity.

It is intended, when the number of cottage patients justifies it, to build a large dining room with a grade entrance on the north or rear end of the present rear portion, extending by on each side, thereby affording north-and-south ventilation, this dining room to be connected with the present kitchen through the basement, leaving the present nurses' dining and sitting room as it is at present.

Space does not permit mention of all the special features incorporated in the building, which should be seen to be appreciated.

The growing necessity for strictly tuberculosis hospital facilities renders this building of extraordinary importance in supplying many well-thought-out features. Rose & Peterson, of Kansas City, Kan., architects of this building, have added another highly commendable achievement to the many they have designed.

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All good ends can be worked out by good means. Those that cannot are bad, and may be counted so at once and left alone.—Barnaby Rudge.



**STANDARDIZATION OF HOSPITALS—CLASS VI, LARGE MUNICIPAL HOSPITALS****Creation of Medical Staff Through Competitive Examination First Great Forward Move—All Other Departments Benefit—Political Control the Curse of Public Institutions—The Story of the Cook County Hospital, Chicago, as an Illustration**

BY JOHN A. HORNSBY, M. D., CHICAGO, IN COLLABORATION WITH MISS MARY WHEELER, PRINCIPAL OF THE ILLINOIS TRAINING SCHOOL, CHICAGO; DR. SOLOMON STROUSE, FORMER PATHOLOGIST IN AND NOW MEMBER OF THE MEDICAL STAFF, MICHAEL REESE HOSPITAL, CHICAGO; MISS RENA S. ECKMAN, FORMER DIETITIAN, MASSACHUSETTS GENERAL HOSPITAL, NOW OF TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NEW YORK; DR. J. T. CASE, ROENTGENOLOGIST, BATTLE CREEK, MICH.; DR. EDWARD S. BLAINE, ROENTGENOLOGIST, COOK COUNTY HOSPITAL, CHICAGO; MR. E. C. LARSON, FORMER ACCOUNTANT, NOW ASSISTANT SUPERINTENDENT, MICHAEL REESE HOSPITAL, CHICAGO; MR. MICHAEL M. DAVIS, JR., DIRECTOR, BOSTON DISPENSARY, BOSTON, MASS.

THERE is no good reason why the standards for publicly conducted and publicly supported hospitals of large size should be any different from those for teaching or university hospitals of the same size, which we discussed under Class I, or those set for Class II, large semipublic hospitals supported by annual subscriptions, endowments, and earnings from patients. Nevertheless, conditions as they exist in this country at the present time will almost compel us to accept a standard for these public institutions not quite so high as those for the classes of hospitals above named. This is due not to any innate difference between the institutions, but to the state of the public mind that has not yet been educated up to a point where payment for service of the highest order in these hospitals will be countenanced by the tax-paying public acting through their representatives in the legislatures, county boards, and municipal councils.

There was a time, not many years ago, when state hospitals for the insane were a disgrace to this country; there then came a propaganda to better conditions in these state hospitals, and that propaganda was so successful in arousing the public to the necessities of a most dependent class of sick that those hospitals are now better than any similar private institutions engaged in caring for the same class of people, and one of the purposes, not the least, of the present propaganda for fixing hospital standards is to bring about the education of the people so that they will appreciate the necessity for paying for better municipal hospitals engaged in caring for the dependent sick of the several communities.

In one way it is easier to control the activities in a municipally supported hospital than those in a private institution or semipublic institution of the same sort, because we can think in terms of the best good of the patient without the need to provide such luxuries and private accommodations as we are bound to provide in semi-public hospitals that accept paying patients.

There are a few large municipal hospitals in this country that compare most favorably with any privately conducted and privately supported institution of like character, but the number is extremely small and the excellence of such few institutions is due largely to the individual qualifications and conscience and strength of character of the superintendent, or to like strength on the part of some individual connected with the government of the locality, such as a governor of the state, a chairman of the county board, or the mayor of the municipality, whose position and influence, coupled with his knowledge of present-day hospital problems, enable him to direct the activities of the institution on a high plane.

A few fundamental principles might be laid down for these large public hospitals, nearly all of which are conducted under the auspices of the municipality in which they exist; a few are controlled by the state, such, for instance, as the New Orleans Charity Hospital, which is located in the city of New Orleans but is conducted under the auspices of the state of Louisiana and which accepts patients from all parts of the state. In nearly every instance these hospitals can be affiliated with medical teaching institutions, and they certainly should be so affiliated if there is a medical school near enough for the material in the hospital to be available for teaching purposes. Nearly all of these public hospitals are amenable to political conditions in their localities, and this one factor is the prime deterrent to good hospital service, including the employment of qualified trained people. The first step toward the creation of decent standards and the conduct of the institution along the plane of these higher standards is to take them out of the maelstrom of politics. While competitive appointment, as we have often stated, is not usually conducive to best conditions of hospital service, it seems there is no other way to free this class of institutions from politics but to place their personnel under the protection of the merit system in order that the positions in

the hospital may not be open to the assault of every incoming political administration. If we can achieve this one thing, that is, the creation of a personnel that will hold over from administration to administration, it will never be wholly impossible to oust incompetent people and to replace them with trained men and women.

As a rule, the per capita cost in these municipal hospitals is not properly distributed—again because of political influence. The politicians first want to control the appointments in these hospitals, and next they want to control the furnishing of supplies, and usually this second factor is hardly less dangerous than political control of the first. If there is the right sort of supply board or purchasing agency which is itself free from the influences of politics, it will not be a difficult thing to buy supplies for the hospital on the merits of the products themselves, but where public bids must be taken on all commodities for the municipal hospital and contracts let to the lowest responsible bidders, it frequently happens that the purchasing agencies will “wink at” the furnishing of inferior commodities under a price that is supposed to bring superior goods—and, of course, the patients are the sufferers and the tax-paying public pays the bills. And yet, it seems there is no other way by which the commodities for a public hospital can be advantageously bought except through the demand of bids and the letting of responsible contracts; so that again it comes up to the conscience of the administrators of the law. The one effective way to insure a proper reckoning on the part of such officials is to create behind them and in front of them a public opinion that will not permit the delivery of cheap goods whether at a low or a high price. It is common experience with hospital administrators in this class of institutions and in the great state hospitals for the insane to have to fight for better goods under existing contracts all the time. Unfortunately, the politicians are too often unable to place the superintendent who dares to do his duty in protest against inferior goods at high prices at the disadvantage of being considered a “chronic kicker” and “out of touch with the administration,” and it is usually easy to bring charges against such a man and have him removed “for the good of the cause.” The corrective in this case, again, is an educated public opinion. We know splendid administrators, men of broad experience, high morals, and an excellent conscience, who have been thrown out of fine positions because they dared to do their duty in protesting, and continuing to protest, against the looting of their institutions by political contractors and purveyors.

#### THE MEDICAL STAFF

In nearly all the ten departments under which we have undertaken to standardize hospitals the same standards will prevail for this class and the same excellence can be demanded as we have demanded for the large teaching hospitals, Class I, and the large semipublic institutions, Class II, but the medical staff can usually be dealt with definitely and to the great advantage of these institutions.

The medical profession is quite as able to demand political recognition as the contractors and the other politicians, and, if doctors are permitted to do so, they will use their “political pull” to entrench themselves in the public hospital of the community and sometimes are extremely difficult to reach, so it seems that the only way that the medical staff of a public hospital can be freed from inefficiency, “dry rot,” and political machination is to place the staff on a civil service basis. That has not been done as a rule, and the best illustration of success in an attempt to create a civil service medical staff has been in connection with one of the worst political nests that ever disguised itself under the name of a hospital, namely, the Cook County Hospital of Chicago. For many years that institution was, to our way of thinking, the worst hospital in this country and from every conceivable standpoint. About ten years ago Henry G. Foreman was elected president of the Board of Cook County Commissioners, very much to the chagrin and disappointment of the politicians. He at once saw the rottenness in the Cook County Hospital and, under the wise guidance of a small group of disinterested and altruistic medical men, headed by the late John B. Murphy, Frank Billings, A. J. Ochsner, Otto Schmidt, and perhaps a few others, he undertook to change conditions from garret to basement. He began with the medical staff, feeling that if there was the right sort of medical staff in control of the care of patients in that institution the rest of the reformation would be comparatively easy. Foreman was not permitted to carry out all of his intentions because the politicians swept him out of the presidency and out of the board at the next election, but he had shown what could be done and he is to be credited with what was done and which under succeeding administrations could not be undone, because it is a truism quite as active in politics as elsewhere, that no obviously good reform can ever be completely and permanently destroyed. Foreman's successor in the county board was a reactionary and essentially a spoils politician, but reaction again occurred out in the public mind and A. A. McCormick was made president of the county board and under his wise ad-



ministration he brought back again the medical men who had been ousted subsequent to the Foreman regime, and civil service in the medical profession was placed on a high and enduring plane. A large group of medical men, headed by those named above, joined to help McCormick create an active working staff for the Cook County Hospital, which, when completely entrenched in office, could bring about reforms clear down the line.

A scheme of civil service examination was contrived and examiners were appointed in the persons of men who were big enough and broad enough to be entirely disinterested and who could not be used by the politicians, even the medical politicians. In this examination a great number of barnacles were swept away and their places were filled by efficient younger men who had the time and the inclination to serve the public in that great institution. It was a long war to bring about these examinations and a hard fight to get rid of the medical politicians who had grown to be a part of the institution and who had been using their places there for their own personal aggrandizement; but the fight was won and a complete staff was finally created, as nearly free from political bias and political influence as it is possible to achieve anywhere.

The men on the staff of that hospital are the best men in the profession in Chicago; nearly all of them are connected with one or another of the medical schools and all the better schools have access to the hospital and the use of certain of its clinical material for teaching purposes; but the schools are not permitted to dictate or dominate the conduct of the hospital and the teaching faculties in the medical schools have no rights in the hospital as school faculty members but only by reason of their membership on the staff of the hospital as created by the board of county commissioners.

Books are kept on the members of the medical staff in the Cook County Hospital, and men automatically oust themselves from membership on the staff by inattention to duty, by failure to live up to the rules, or by absence for a certain number of days in the year. The result is that here is an activity and a liveness in the medical staff that brings to the sick an exalted service on the part of medical men and a keen and constant interest in the work.

We have gone to some length and have dilated on this one public hospital medical staff because, whereas ten years ago it was probably the worst hospital in the country, it is now probably among the very best, at least so far as the medical service to the sick is concerned. And there was one

more reason why we felt justified in dilating on this particular instance, namely, to illustrate the fact so often expressed that, as the medical staff is, so the hospital will be. The high character of this medical staff and the keen interest the men take in their work have had its effect clear down the line. Of course, the new building is partly responsible for better service, but it is not solely responsible by any means. There is a new regime in the nursing force, and since the new medical staff arrangement went into effect the organization of the Illinois Training School for Nurses also underwent certain organic changes which fitted it all the better for the service of the hospital. While the warden is still a political appointee and without experience or training as a hospital man, the assistant wardens, one day and one night man, are both excellent hospital officers and are given practically a free hand in their respective departments. The other personnel of the hospital has been changed in weak spots, until now there is a very good organization and the sick are getting far better care than they ever got before, all under the stimulus of a wide-awake, responsible medical staff with Dr. Joseph L. Miller, trained in the Presbyterian Hospital administration, as the chief of staff. In this hospital all the services are represented and there are enough men in each service to do all the work, without any ornamental members left over.

Under such an inspiration as this the scientific departments of the hospital, in turn, are stimulated to their best efforts. The x-ray work, under Dr. Blaine, has taken on a very high character, the laboratories, for which specially designed space is not yet available, are, however, doing good scientific work, and even the dietitian, in the most difficult of all situations in any hospital at the present time, is appreciated and is made to realize that she is a part of the medical service to the sick.

#### OTHER DEPARTMENTS

In our August issue we discussed the establishment of standards in the special departments of the university or teaching hospital and these will all apply to the large municipal hospital as well.

An additional word might perhaps be said, however, in regard to the out-patient service in the large public hospital. If an out-patient department and dispensary is available in any hospital it is a definite and tangible, and dollars and cents as-set to the public hospital whose patients are all dependent, and in proportion as the out-patient service and the dispensary are maintained at their highest possible character just in that proportion will we make it unnecessary to house in the hospital itself a great number of additional patients.

We have said elsewhere that a dispensary is useless unless there is a definite and careful examination made with a view to correct diagnosis, and unless there is a serious attempt made to treat patients efficiently before they go to the hospital beds. Very many of these patients can be kept out of bed and out of the hospital by careful attention, and by the maintenance of a dispensary of

a high character it will very soon be apparent, even to the ignorant and dependent classes that patronize the free hospital, that they can get a real service there, and they will not only utilize that service, but they will carry out the orders that are given, they will actually take the medicines distributed to them, and they will follow the orders given.

### THE SMALL-TOWN HOSPITAL—SOME OF THE BASES OF ITS SUCCESS

#### **The Doctor Is the Prime Essential—Rigid Rules as to Routine Examination of Each Patient Necessary—Business Manager Should Be a Compound of All the Virtues—Pleased Patients the Best Advertisement**

BY MARGARET GIFFEN PHIFER, WHEATLAND HOSPITAL, WHEATLAND, WYO.

**T**HE prime essential for running a successful hospital is a competent doctor, or doctors. Unless you have a surgeon and a physician of wide experience, who can "deliver the goods," your hospital is doomed from the start. Hospital facilities, undirected, will not cure patients. A town full of sick people wouldn't be the basis for a successful hospital. The sick folks would go somewhere else, and the hospital would stand empty if there were no well-qualified medical and surgical staff to treat them, whether that staff should number one or a dozen.

If you should come to me and say: "We have a small town of so many hundred people, and we need a hospital; how shall we go about getting it?" I would tell you: "Get the right doctor, and he will manage to get you a hospital, because he will not be content to treat your sick without it."

It is impossible to exaggerate the importance of this factor in the success of the hospital. If you are not yourself a successful surgeon and an all-around medical man, with at least ten years' experience, do not attempt a hospital in a small town, because it is essential to success that you should be in a position to have absolute control of everything that comes into your building. You cannot cut down your mortality rate by refusing admittance to the desperately ill, since these are the very cases that most need hospital advantages. You cannot allow your hospital to be termed either a cemetery or a butcher shop. Your only salvation is personal supervision of all cases admitted to your hospital, and full control as to the treatment after they have been admitted. Allow no man to work in your hospital unless he has demonstrated his good judgment and ability to treat diseases intelligently.

The type of physician who is willing to treat a case of "inflammation of the bowels" for ten days without a blood count, chronic headaches without a urinary analysis, or cough and "colds" without

a sputum examination, is not the man whose assistance will be of any value in helping to build up your institution. Likewise, the surgeon (self-styled) who is willing to attempt a goiter operation, plate a femur, or do a gastro-enterostomy, when he is not capable of properly removing a normal appendix, is not the man to be desired as an associate. Nor is it wise to cater to the man who will carry a maternity case through pregnancy without an examination of the urine, or set a fracture without an x-ray plate, or do a tonsillectomy without a coagulation test or a urinalysis.

The antagonism of such physicians will do you less harm than their friendship. The other physicians of the community cannot ruin your hospital by opposing you. They *may* do it by working with you, especially if you allow them to make a "dumping-ground" of your hospital for such of their cases as are going wrong.

Have rigid rules about the routine examination to which every patient must submit upon admission, no matter how trivial the ailment may apparently be. A thorough study of every case is illuminating and well worth the time, trouble, and expense entailed; many a time it will save you what might otherwise have been a serious slip.

In the small-town hospital, as contrasted with a large city hospital, the surgeon who would build up his clinic must be conservative. He cannot afford to take a chance, except in those desperate cases in which his conscience will not permit him to refuse the chance to the patient. In the small hospital, the mortality rate is closely watched and rather generally known to the public; and every fatality counts heavily against the hospital. Many of the cases brought in have been neglected and are bad risks; but the general public makes little allowance for such a handicap to the surgeon. He can counterbalance such drawbacks only by extreme care in what he undertakes to do. "Safety first" has to be his motto. In our personal obser-



vation of small hospitals, failure to realize the importance of this consideration, more than any other one thing, has been responsible for their limited measure of success.

Next in importance to the attraction of a medical and surgical staff of ability is the necessity for the right kind of a business manager. I hesitate to enumerate the qualities this person will need, for it will

read like a list of all the virtues. Common sense, enthusiasm, energy—these are absolutely essential. The business manager's vision must be broad enough to catch the merest glimpse of possibilities for expansion, and narrow enough not to lose sight of details; discreet enough to measure the

true proportions of an obstacle in the way, but able also to see a goal beyond, to which a path must be found, "over, under, around, or through." The person who is capable of giving up in the face of difficulties is not capable of building up a hospital out-of-the-ordinary, in a small town, for we

can prophesy from experience that the way will bristle with obstacles.

In regard to the size of the town, anyone will concede that a town of eight hundred or a thousand people cannot alone support a well-equipped hospital. In the first place, it would be almost a miracle if the hospital received the undivided support of the entire community, and, in the sec-

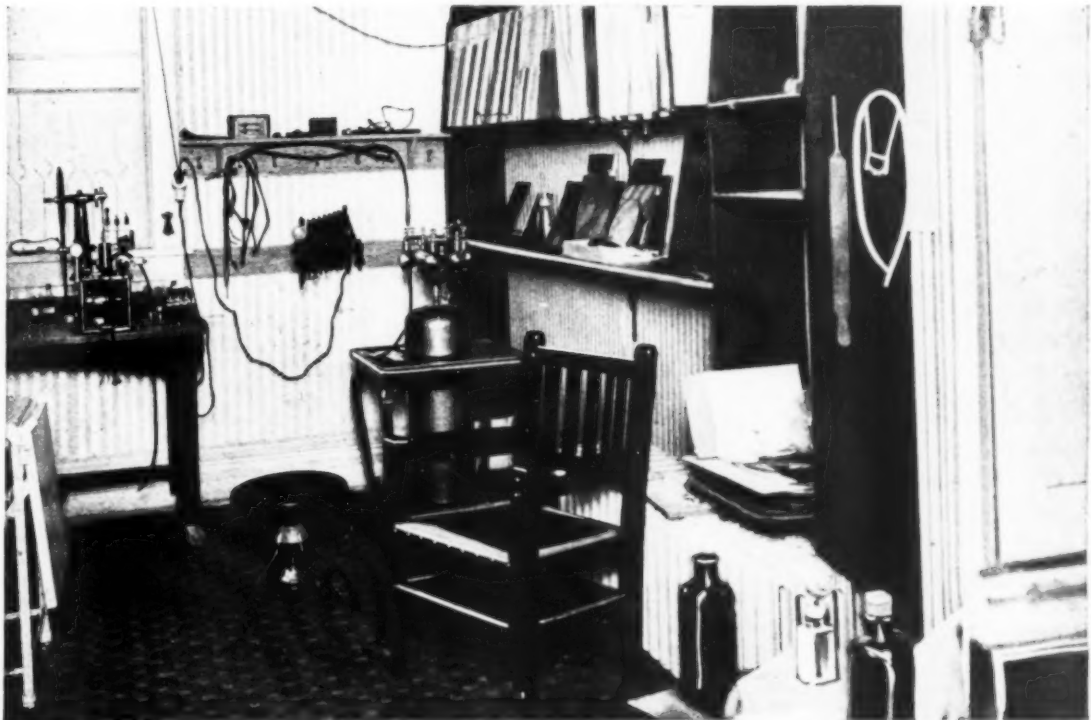


Fig. 1. A bit of the nose and throat department of Wheatland Hospital. The Wheatland Hospital, though situated in a small town, draws from a large territory. It is a general hospital, with a present capacity of forty beds. It is somewhat unique in that the one building houses not only the patients, but all doctors, nurses, and employees, the separate wings doing away with noise and confusion. The central portion of the building provides room for all offices, laboratories, and special departments, so that a patient can receive every needed attention without loss of time or convenience.

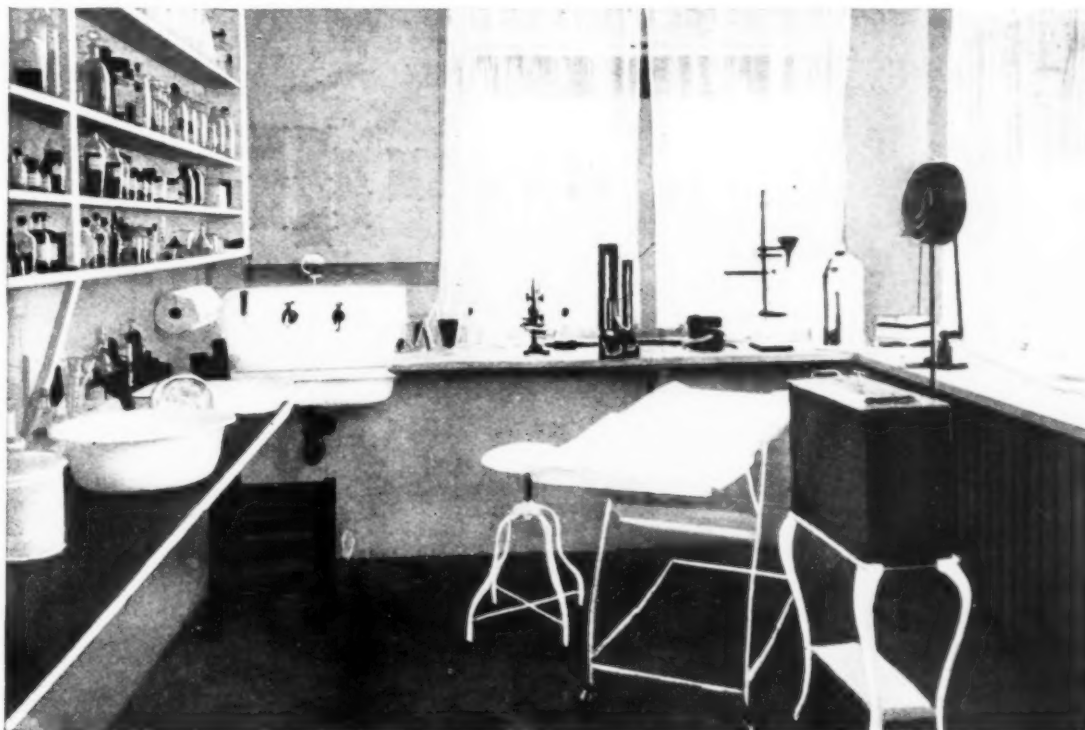


Fig. 2. The laboratory of Wheatland Hospital. The laboratory, the x-ray department, and the equipment for treatment by hot-air, baths, and electricity are all unusually complete. The hospital also has its own pharmacy, electric light and power plant, steam laundry, carpenter and plumbing shop, and animal clinic for experimental work.

ond place, even if it did, the undivided support of a town of that size would not be sufficient. If such a hospital thrives in such a town, it must have sufficient attraction to draw patronage from the outside.

The fundamental basis of that attraction must be a higher percentage of relief and cure than the patients within its reach can obtain elsewhere.

In the beginning, the field of the hospital will necessarily be limited to its immediate environment; but the higher the percentage of relief, the more rapidly will the reputation of the hospital spread. It is possible for a hospital in even a very small town to draw from a wide area.

The whole country is becoming slowly but nevertheless surely converted to the hospital idea:

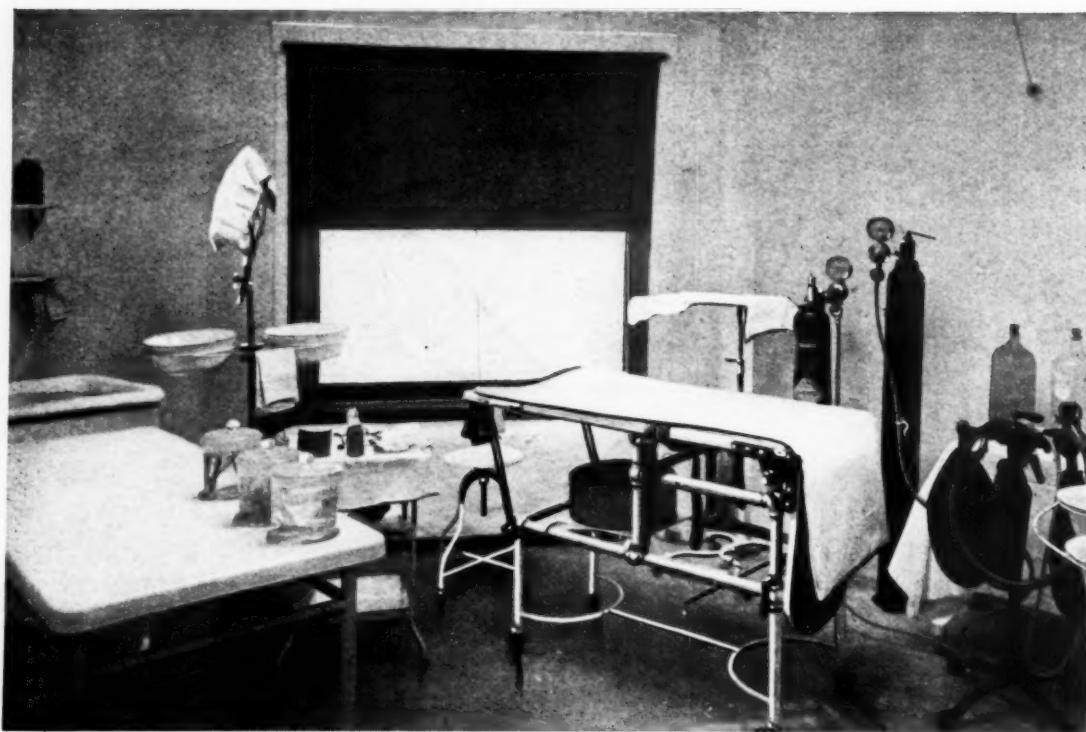


Fig. 3. A glimpse of the operating room. While all classes of cases are handled in Wheatland Hospital, two-thirds of the work is surgical, the field of general surgery, both major and minor, being pretty well covered.

that the hospital is the only place in which the sick can get accurate, scientific diagnosis, and modern, up-to-date, humane treatment. A well-manned, well-equipped hospital is bound to win public recognition.

The best advertisement that a hospital can have is a pleased patient. If you can send out 98 percent of your patients with smiles on their faces

and good words for your hospital, you have the makings of success.

Require your hospital staff to keep their dignity and command respect; but choose your assistants, nurses, and employees with a view to their ability to make friends. No matter what his or her capability along other lines may be, an employee of an unpleasant or unattrac-



Fig. 4. An open-air sun porch. The hospital is fortunate in having a sun porch which is attractive, sunshiny, and sheltered. The climate of Wyoming makes it possible to use this porch throughout most of the year.



tive personality is a positive detriment to your institution, and such handicap should be avoided.

Do not try to make a reform school out of your hospital. In the small place, you cannot have rigid rules for the conduct of the patient or his friends; and such rules as are absolutely necessary must be enforced with tact and discretion. Simple kindness is invaluable in a hospital. Never forget that it is important to please the family as well as the sick person. They outnumber your patients, and should every one go away "boosters" for you.

Make your hospital as attractive as possible. It is not enough that it should be cheerful, sunshiny, and health-giving. It must have an aura of home about it, something human and warm. Have a meeting place, "a living room," for your convalescents and their friends; help them to get acquainted with each other; make them feel that they are all fellow guests under your roof. Lasting friendships will be formed that will keep green the memory of your hospital. As one departing patient remarked the other day: "I never heard of coming to a hospital to have a good time, but I feel as if I had been on a vacation."

In the matter of equipment, needs will vary; but do not forget that the small-town hospital must be more complete than the city institution of several times the number of beds, because in a small town the hospital has to be sufficient unto itself. It has no outside source upon which it can draw in an emergency. Have all the equipment that you can afford and a little more—provided you can use it. An idle piece of apparatus has very little advertising value. Never be content with present attainments. Keep on learning, keep on buying, keep on growing. As your hospital grows beyond the scope of one man's ability to do the work, secure dependable subordinates. One department must not lag behind the others. A competent, conservative surgeon and a skillful diagnostician and medical man you must have; but you must have good nurses, too, and an anesthetist, and a pathologist, and a roentgenologist.

Each hospital must, to a certain extent, work out its own salvation along individual lines, emphasizing special features, and choosing its own publicity methods. No hospital will go far wrong if its constant aim is "Better service to the sick."

### RECLAMATION OF THE REJECTED CANDIDATE FOR THE ARMY\*

#### What We Face in the Great War—Need of Plan to Replace Tremendous Wastage in Army—Saving in Reclaiming Men With Slight Defects

By JOHN H. QUAYLE, M. D., CLEVELAND, O.

YOU probably have heard more or less of the reclamation plan to reclaim the unfit not only for military service, but for efficient citizenship. In the first place, I want to give you my opinion of the difficulties that we face in the war in which we are now engaged. Personally, I feel it is up to the United States to win this war or to pay tribute to the Prussians for at least the length of the lifetime of the members of this assemblage.

I saw the last kaiser's parade prior to the war. In order to see it we had to stay up all night and be on the field at five o'clock in the morning, and at six o'clock exactly (not at one minute past) the kaiser rode onto the field with his staff and reviewed 2,500,000 men, who passed before him as one man, and he sat on his horse from six o'clock in the morning until two in the afternoon without moving except to salute. I saw this same parade ten years before, and I want to say that there was as much difference in these two parades as there is in the automobile of today and the one of ten years ago.

In this setting, imagine several Zeppelins flying

overhead, and from 50 to 100 monoplanes operating above us—monoplanes which could get off the ground in a distance of 100 feet, equipped with motors of 450 horsepower.

I also had a pass to the flying grounds at Johannesthal, which I visited during my stay in Berlin from one to three times per week. At this time there had been a Frenchman who had flown upside down, done the loop-the-loop and other stunts, as you saw Ruth Law—a mere woman—not a soldier, do in Cleveland in the past ten days. This was being imitated by the German officers at the flying grounds, and during my stay in Berlin there were over fifty men killed from attempting these same stunts and not a single Berlin paper mentioned one of these casualties. One night, when I came out on the grounds, I saw a wing drop off an aeroplane which was 3,500 feet in the air, and these poor fellows hurtle to death, without a single man who was in the air coming down to see the accident. Within two minutes of the time the aeroplane struck the ground and had torn the arms, legs, and heads off the men, there was not a sign of an accident, as the ambulance had run out from the side lines and picked up the

\*Read before the American Hospital Association at its nineteenth annual session, Cleveland, O., September 12, 1917.

pieces and the motor truck from the hangar had gathered up the pieces of the aeroplanes.

This is the military spirit that permeated Germany prior to this great war. We all hold the fond illusion that there will be internal troubles in Germany, and the President has encouraged this hope in his wonderful reply to the Pope; this has strengthened us in believing that civic conditions in Germany would win this war for us without loss of life to us, and all we needed to do was to furnish the allies sufficient money and they would win the war; but I want to say that my own opinion, based on familiarity with the psychology of the average German, is that the child is brought up first learning to speak the word "kaiser," second, "fatherland," and way down the line, "Gott," and later, "father and mother," and they would not think of attacking the army any more than we would something we know is wrong. This is what we have to combat. In my opinion, with the extraordinary efforts which are being made by the government at the present time, it will take us from five to ten years to overcome the common foe. It is perfectly true that some of our newspapers win the war each morning, and in the afternoon arrange the terms of peace, but the Germans fight on without any fuss or feathers, and undismayed.

A full realization of the meaning of man power and the tremendous wastage which is taking place in our army is the thing that prompted the reclamation plan, which I have presented to the government. The reclamation plan is nothing more or less than the simplest form of prophylaxis.

Senator Pomerene has introduced a bill in Congress providing for a hundred millions of dollars to carry out this plan, which, from the best figures obtainable, will reclaim at least 2,000,000 men, who will be ready and willing to fight, and each of whom has the psychology of a soldier and will be a real soldier when he goes to the front.

The Surgeon-General's report, which I have on my desk, for the fiscal year ending June 30, 1916, shows that four out of every five men who volunteered for the army during 1915 and 1916 were rejected for causes trivial and absolutely remediable in the great majority of the cases.

I have also the Adjutant-General's report for the month of March, 1917, during the time at which the flower of American manhood was volunteering for service and to fight this common foe—when so many men were volunteering that the colleges were being broken up—and during this month of March, 1917, only one out of three of the men who were conscientious and believed themselves physically fit to go to the trenches and fight were able to pass the physical examination of the

army. What is wrong? What is the matter that this thing should happen in America, who prides herself on being the greatest people in the world? There is only one answer, and that is—lack of universal military training.

The majority of the boys from the ages of 18 to 21 years are learning to drink and contracting venereal diseases; they do not know the meaning of the word "discipline," and, when they are subjected to it, rebel. Universal military training, in my opinion, will do more for the physical, moral, and mental condition of the individual than it will for militarism.

The bill introduced by Senator Pomerene provides that a commission shall be appointed consisting of medical, civilian, and military men, who shall determine where the camps shall be located, and, when a man is rejected either by the examining board or at the cantonments, he will be referred to a board appointed by this commission, who will take him to a first-class hospital where an absolute diagnosis can be made, based on x-rays of the chest, and the different blood and serologic examinations; an absolute prognosis will be made for this man, whether he can be reclaimed and made a real fighting man within a period of time varying from one to six months. If he can be, he will be accepted by the reclamation camps and his difficulties remedied by medical and surgical science, and, if it is not possible to reclaim him, he will be given his examination reports showing his physical deficiencies, so that he may go to a doctor (who possibly would be unable to make all of these examinations without great expense), but who is perfectly capable of treating him, thereby producing a fine citizen at the best time of his life, namely from 21 to 31.

It is my idea that these camps should be located near the large cities, which can furnish the best specialists in every line to make these examinations and do the operations, and, after the patient's recovery, he would be returned to the reclamation camp, which would be adjacent to the city, where he would live an outdoor life, on a simple diet, *under discipline* and the proper regime that would make him a real man.

I have every reason to believe, from the correspondence and the interviews between Secretary of War Baker, Senator Pomerene, Surgeon-General Gorgas' office and myself, that this bill will be passed as soon as the government is able to equip the men under the selective service draft.

You may say that this reclamation project is not necessary, but I want to say to you that there are two forms of examination, the white book, which was prepared under the authority of the President and the Secretary of War for the guid-



ance of the present civilian examining boards, and the blue book, which is the regular army examination and which examination every man has to pass when he arrives at the cantonments, and it is my personal opinion that a large percentage of the men who are sent to the cantonments will be returned as physically deficient.

If I had more time I would be glad to go into the subject of the causes of rejections from the army, and in conclusion I want to say that in Canada for every man who was broken down in training it has cost her \$2,000. We have figured that it will cost \$50 to reclaim each man. If with a hundred millions of dollars we reclaim 2,000,000 men, as H. P. Davidson, head of the Red Cross, has aptly put it, "you have increased our national wealth thirty billions of dollars."

### PLACING CRIPPLES IN INDUSTRY

#### Sympathetic Oversight and Encouragement Necessary— Work of the King's Chapel Committee for the Handicapped

BY ELFRIDA RIGBY, Placement Worker, King's Chapel Committee  
for the Handicapped, Boston

It is within very recent years that scientific methods and even ordinary care have become recognized as essential in selecting men for employment in modern business houses. With the recognition of these facts the necessity for vocational training and the almost greater necessity of vocational guidance have been impressed on the employers and educators. As this has been found to be of great importance with the physically normal, how much more essential must it be to those who through some misfortune have been deprived of their full faculties.

Until very recently the cripple has been the object of hopeless and helpless pity, and even now it is rarely considered possible that he may become an economic asset to the community. To make and prove him such has been the work of the King's Chapel Committee for the Handicapped, and experiences of the last five years have justified the belief that this is possible.

The first thing to be done is to convince the cripple that it is in his power to become a wage-earner and a thorough physical examination is insisted upon in order that the correct idea of his full capabilities may be formed. Frequently special training is advised. It is found that if a cripple is to compete with a normal person for a position he must have some special qualifications to make him preferred before the latter. He must be quicker at figures, pleasanter in manner or disposition, defter with his fingers, show better judgment than his more fortunate fellowman, for it is only on account of his worth that he will be employed. It is a business proposition with the employer, and to be on a firm foundation a placement must be recognized by those working with the handicapped as a business deal.

A position is obtained usually through personal solicitation, the limitations of the patient being fully explained to the employer. When once it is secured, however, it is not sufficient to leave the cripple to sink or swim. He still needs careful and sympathetic oversight, someone to encourage and admonish, until such habits of industry, self-reliance, and independence are formed that supervision is

no longer necessary and he has learned that he can turn to the bureau as a friend whenever serious difficulties arise.

Occasionally a first placement does not prove to be the best adjustment; then a second and even a third is undertaken before a patient is finally dropped as uncooperative. All are made to feel that they should contribute something to benefit the large number of fellow cripples, and that to succeed in their own work is the surest way. It is the one way of gaining the cooperation of employers and perhaps another opportunity for a handicapped person in the future.

The following are two stories of patients helped by the bureau:


D. P., 44, is almost a dwarf, as a result of scoliosis. He came to this country a few years ago and found employment himself, but in spite of a good record, he was obliged to give it up, as the constant lifting involved was too great a strain on his back. He succeeded in finding other work, but it was even more laborious, and, although he had been furnished with a brace, he left and returned to his first place. He received \$12 a week, but more on account of his faithful service than his ability. Again, after a short trial, he found the work too hard. Finally he came to the committee, asking them to help. A position was found for him at which he is able to sit all day. He no longer suffers as formerly and is earning the same wage. The employer, after a week, reported that the patient was becoming quite "frisky," and the patient himself said he never realized that work could be so light, and that he will remain with the firm as long as they will have him. He has been offered more money by his first employer, but has refused it, having once enjoyed work with freedom from pain.

Fanny was a quiet and attractive girl in her twenties, who had her right arm amputated above the elbow as a result of an accident suffered while working in a laundry. She was anxious to earn something at once, as her parents were dead and she and another sister had several younger brothers and sisters dependent on them alone for support. An opportunity was found for her to learn to operate a telephone switchboard and as soon as she was proficient, a position was secured by the placement worker in a private hospital to work nights. She started at \$20 a month with board, which with her compensation was as much as she had earned previous to her accident. Her service is perfectly satisfactory and the girl herself is much happier doing something, and at the same time she is no longer worried over her financial difficulties.

The work of placing the handicapped in industry is a matter of intensive and extensive education of the cripple, his family and friends, and also the employer. It cannot be done quickly or in a wholesale manner, but it can be accomplished because it has been accomplished, and all should do their share to promote interest in the movement, especially in view of the serious problems likely to face the country now it is at war.

The experience in Europe has shown that the matter of employment and medical treatment are very intimately related. Would it not be well for hospitals and clinics to see if they cannot render still greater service to their communities by saving not only the lives and limbs of their patients, but also their economic and moral value? Let them form bureaus similar to the King's Chapel Committee for the Handicapped.

A good deed is never lost. He who sows courtesy reaps friendship, and he who plants kindness gathers love.



*The*  
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Contributors, subscribers, and readers will find important information on advertising page 34.

### The Fixing of Standards

The Hospital Standardization Conference, held in Chicago October 19 and 20, under the auspices of the American College of Surgeons, was, to the hospitals of this country, the most important meeting that has ever been held.

For years we have been attempting to obtain a point of approach to the problem of standardization; committees have been appointed from the American Medical Association, the American Hospital Association, the Clinical Congress of Surgeons, and other organizations, to study the problem with a view to getting hold of a starting point from which some definite results could be obtained. Almost insuperable obstacles have presented themselves, and, in spite of some hard work and some careful thinking on the part of a number of leaders in the medical profession and in the hospital world, we have really arrived nowhere.

The meeting at Chicago brought together a large number of very prominent medical men in all branches of the profession, and some of the leading hospital men of the country, including the presidents of the two large associations. Announcement was made that the American College of Surgeons had been given a considerable fund, amounting to about \$60,000, for the purpose of undertaking the work of obtaining some hospital standards by which better service in the hospitals

could be attained in the easiest and most helpful way.

Included in the story of these Chicago meetings is a list of a general committee of twenty-five men from all parts of the country to act as a consulting board to prepare some formulas and to begin and carry along the work. It is intended to begin the making of personal inspections of hospitals, inspections that must be more or less crude at first, but which must be, of their very nature, most helpful and instructive. As the work goes along these inspections will attain more definiteness and the hospitals will be classified.

THE MODERN HOSPITAL bespeaks the cooperation and participation of boards of trustees, superintendents, medical staffs and departments of all the hospitals in this work. It may be stated with the utmost assurance that there is no disposition or desire to hurt any hospital anywhere, but only to help.

Many boards of trustees are quite well satisfied with conditions in their own institutions, and this attitude is probably the greatest obstacle existing at the present time to the betterment, by superintendents and by medical staff members, of conditions in the hospitals. With leadership in the work of standardizing by so responsible a body as the American College of Surgeons and its general committee, it is certain that the eyes of trustees are to be opened in regard to the conditions in their own hospitals, and the next step will obviously be improved conditions.

### Open-Door Hospitals

It developed at the hospital standardization meeting of the American College of Surgeons that medical men working in the hospitals of the Pacific Coast are dissatisfied with conditions existing in the far west institutions because of the absence of responsibility for the scientific work being done in them. It appears that there are no medical staffs on the Pacific coast, and that any doctor in the community is entitled to treat his private patients in almost any of the hospitals without let or hindrance. It seems also that this wide-open policy has made it possible for the most arrant quacks to go into good hospitals and practice the most arrant charlatanism. Some exceedingly good hospital administrators believe in the open-door policy, and, obviously, trustees of these hospitals believe in it because it is in the interest of the financial success of their institutions. A hospital, for instance, that has two hundred doctors interested in sending patients to it will not want for financial support by way of fees from patients.

But this policy leaves so much to be desired in



the efficiency of the hospitals that the time must come, and that soon, when better system must be employed if the demands of modern medicine are to be met, and these demands can be met only if the scientific work in the hospitals is under the control of qualified and ethical members of the medical profession. In order to fix such control, it is necessary that, in every hospital, some sort of medical board be instituted that will have the authority to prescribe a definite technic under which approved medical procedure can be done. It makes no difference whether this medical board be called a staff or an auxiliary to the trustees, or something else; but it is absolutely necessary that there be some authorized control and that somebody, somehow, shall be responsible for the kind of work being done in the institutions.

There is a widely prevailing notion that the creation of a medical staff for a hospital means that no one except medical staff members may treat patients in the hospital. Nothing is further from the fact than this. With the most tightly closed staff any reputable practitioner may treat his private patients in the hospital, the only proviso being that he must employ means and methods of procedure that are approved by our modern knowledge of medicine.

Every hospital should have a medical staff, and there should be on this staff representatives of all the branches of medicine—a sufficient number of representatives in all the branches to do the free work, or, as we call it, the service work of the institution. There should be a regularly organized representation of each service with a chief at the head of each, and these service staffs should be quasi-administrative in character, at least so far as the medical service of the institution is concerned. These service staffs should prescribe rules for procedure in their several services. For instance, the surgical staff should prescribe, in definite printed rules, a technic for the operating and dressing rooms and for the care and treatment of surgical cases; and every man not on the staff who comes into the hospital with a private patient of his own should be compelled to operate under these rules. Otherwise, there can be no technic of any kind in a hospital; the interns cannot possibly be trained, nor can the nurses. Where every man is permitted to do what he pleases in the way that he pleases, the practice in the institution will become absolutely chaotic; there cannot possibly be a decent asepsis or a decent operative procedure, or a decent after-care of patients.

It has been said that by the operation of a closed staff many practitioners in every community, having large private practices, will be debarred from the privileges of the hospital. This,

of course, is not true, but practitioners will be debarred from doing bad and unnecessary surgical work and from practicing medicine in ways that are obsolete or not in accord with the modern science of medicine.

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### Hospitals of the South

In this day, when the light of publicity is being thrown into the hospitals of this country, and when the public is being educated up to what a modern hospital ought to be, it is developing more and more clearly that the hospitals of the South are not maintaining the same ratio of progress as institutions in the North, East, and West.

This situation must be cured, and the hospitals of the South and leaders in every walk of life must bestir themselves and bring about better conditions in their institutions for the care of the sick. To our way of thinking, one of the most fundamental reasons why the South has not progressed so rapidly during the last two score years as other parts of the country is that the care of the health of the people has been neglected. No community that has not health can possibly be prosperous; a very large percentage of sickness is preventable. Without the stimulus of a good hospital, medical men grow lackadaisical, indifferent, and eventually rusty as to their skill and ability, and employ their time and talents exclusively for the cure of disease rather than a large part of it in measures for prevention.

Wherever there is a good hospital, conducted by a well-trained administrator, under the auspices of an ambitious and enterprising group of medical men, there is bound to come a most wholesome and healthful state of social welfare in the community. Those in charge of the hospitals of the South, those who hope or expect to benefit financially, morally and spiritually, or physically by healthful conditions, therefore, should bend every effort in the next few years toward getting better hospitals.

There are in the South a few places where the benefits of good hospitals are being demonstrated. There are a few hospitals in the South of splendid modern architecture, well adapted for the purposes for which the institutions are designed. There are a few communities thoroughly well organized in the work of their hospitals. These examples ought to be studied by other communities and the whole South should benefit.

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### Medical Men in the War

Announcement has been made by the Surgeon-General of the Army and by the Surgeon-General of the Navy that a sufficient number of medical

men have volunteered their services as officers in the Reserve Corps of the two branches to meet all the requirements for the first army of a million men. It has taken approximately fifteen thousand medical men out of the civil life of the country to do this.

The medical profession of this country is to be sincerely congratulated upon this splendid showing. Not one of these fifteen thousand men has joined the colors without making a serious and substantial sacrifice, and it is in keeping with precedent in the medical profession that its members have not hesitated one moment to rush in wherever they heard the call of distress or where there was need for the care of the sick. That the need in this case is felt by the government itself in no degree lessens the meed of praise to be bestowed.

Soon after the first of the year the enrollment of the second million men will be commenced, and it is announced authoritatively that approximately twelve thousand more medical men are to be needed. Already there is abundant assurance that the call will be heard and the response generous and immediate.

This is an hour of critical and extreme anxiety for our country. The response to the call of the country from every walk in life, men, women, and children, has been more than generous. This war has developed a patriotism that we in our ease and luxury of prosperity had not even suspected, and it is a proud day for us of the medical profession and for us of the hospital world that our share has not fallen behind and that there have been no slackers.

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#### War Prices Versus Waste

It makes not quite so much difference that prices of commodities have soared as one of the results of the war. There are many compensations for these high prices. It does make a vast difference, however, whether the same wasteful practices are maintained that were the habit of most hospitals in a less unusual and more prosperous hour.

Many hospitals have installed systems by which greater economies could be practiced. In many institutions food supplies have been put on a day-to-day schedule, with the pounds and ounces carefully measured and recorded. In other institutions, less systematic but quite as rigorous schemes have been designed and put into practice by which waste clear down the line has been measurably cut down. But not enough of this has been done, and today the hospitals of the country are wasting vast quantities of expensive materials, not alone foodstuffs, but medical and surgical sup-

plies, consumable janitors' supplies, and laundry materials.

Many of us are using today in our institutions precisely the same materials that we used before the war, such as potash soaps, woolen fabrics, and the like. Potash is now prohibitive in price, and soda soaps must be used as substitutes; blankets and other woolen goods that were formerly used pure should now be changed; wool from the sheep's back is now worth fifty cents a pound, which is a prohibitive price for hospital blankets and other woolen fabrics, and there is no doubt whatever that fabrics containing large percentages of cotton can be used most advantageously, provided better laundry conditions are instituted—conditions that will permit the proper laundering of so-called cotton blankets and things of that sort. Administrators should inform themselves as to the care of cotton goods and the best methods of saving on all sorts of hospital supplies. Vast economies can be practiced if the superintendent will study his and her problems and meet them according to modern methods.

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#### Service Flags for Hospitals

In another column will be found a most interesting story by Dr. Charles H. Young about the service flag flying over the Presbyterian Hospital, New York, showing in stars the number of the workers in that hospital who have joined the forces for the war.

It will be noted that service flags are flying from many office buildings and factories, all over the country, showing the number of those employed in the various establishments who have gone to the war.

Every hospital in this country should have its service flag, and we can rest assured that the hospitals will make as good a showing as any other class of institutions, industrial or otherwise. Dr. Young's 192 stars is a magnificent expression of the patriotism of the Presbyterian Hospital. Are there not many other similar institutions in the country that can show as proportionately large a number who have given their services to the country?

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Wonderful is the way in which people will go upon the slightest observation, or often upon no observation at all, or upon some saw which the world's experience, if it had any, would have pronounced utterly false long ago.—Florence Nightingale, "Notes on Nursing."

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I am not ashamed of being an optimist, for optimism means faith in life, in your fellow-men, the justice of your cause, and the moral government of the world.—Mr. Prothero.



## HOSPITALS OF THE UNITED STATES TO BE STANDARDIZED

**American College of Surgeons Holds Great Meeting in Chicago to Launch Movement to Better Hospital Conditions—Many Notables Present—Large Permanent Committee Appointed—Proposed Work Outlined—  
Story of the Meeting**

The most important meeting for the hospitals of this country that has ever been held occurred in Chicago on Friday and Saturday, October 19 and 20, unfortunately, too late for a full account to be published in our November number. Only the first paper read at the meeting, that by Dr. John A. Hornsby, was available at the time; four other papers, vital to the purpose of the meeting, are published in this number. The sessions of this meeting were held in the Congress Hotel, Chicago, and occupied all of the two days of Friday and Saturday, the Clinical Congress of Surgeons of North America and meetings of the regents of the American College of Surgeons following on four days of the next week.

To this meeting were invited about 350 people, including Fellows of the American College of Surgeons, prominent internists and other specialists in the medical profession who were known to be specially interested in hospital problems, superintendents of prominent hospitals of the country, presidents of the two large hospital associations, and editors of the leading medical and hospital journals.

Nearly all those invited were present when Dr. John G. Bowman, director of the American College of Surgeons, called the meeting to order on Friday morning, October 19. Dr. Franklin H. Martin, the general secretary, was prevented from being present by serious illness.

The meeting did much to clarify the problems of standardization, and all those who attended were far better informed as to the views of all interested groups, when the meeting closed, and went back home enthusiastically determined to help carry out the program agreed upon, and to use all their influence with their local hospitals in the interest of improved hospital conditions.

The meetings were most enthusiastic from every conceivable standpoint, from the drop of the gavel on Friday morning until the close of the dinner with which the meetings ended on Saturday night, and the feeling was unanimous that for the first time in the long propaganda for the standardization of hospitals there was a fair promise that something definite and in detail was on the way to accomplishment. The enthusiasm at the meeting was emphasized by the fact that nearly every one invited was present, excepting about fifty or sixty who responded by letter saying that they were in the service of the army or of the navy and unable, for that reason, to come. Some of those in attendance were from the Pacific coast, some of them from the farthest points of Canada, and many from the extreme south, besides, of course, a large contingent from the Atlantic seaboard. Geographically, it was a most representative meeting, every part of the country and every hospital interested being represented.

Wisely, the program had been divided into three parts:

1. The hospital problem of today, what it is, as to property and value of the hospitals, their cost of administration and the work they are doing.

2. What has the medical profession a right to expect of the hospitals that they are not now doing?

3. How are these results to be brought about?

When the morning session of the first day's session was called to order, Dr. Bowman, presiding, stated the purpose

**WHAT THE HOSPITAL STANDARDIZATION SESSION ACTUALLY DECIDED ON**

1. The appointment of a general committee of twenty-five to act as a consulting body to help in the preparation and carrying out of the plans of standardization under the direction of the College, the committee being made up of the officers of the College, nine surgeons, five internists and laboratory men, four hospital administrators, the President of the American Hospital Association, the President of the Catholic Hospital Association, and one representative from each of the army, navy, and public health services of the government.

2. The appointment of a general committee in each state to have general charge of the work of the state, including the creation of a subcommittee in each county and each municipality.

3. Inspection of the hospitals of the country by trained men working under a definite questionnaire and schedule to be prepared by the general committee of twenty-five above named.

4. The tabulation and publication of the results of these personal inspections under the auspices of the American College of Surgeons.

of the meeting and the intention of the College to make standardization of the hospitals its central activity and thereby to advance not only the public welfare, but also those ideals of service of which the profession has long been justly proud.

A significant feature of the conference is that it is not to end in mere talk. It laid ground-work for action. As soon now as a General Hospital Committee appointed by the Regents of the College approve some details of the plan, the hospitals of the continent will each be sent a statement of the scope of the work and will each be invited to become a factor in a great cooperative program directed toward better hospital conditions. That is the initial step. A minimum standard of efficiency which a large proportion of hospitals either now do meet or can easily meet will then be determined upon and serve as a guide and incentive for further progress. The basis of the plan is that it be an evolution of steady and inspiring headway among hospitals.

After the reading of Dr. Hornsby's paper, in which a large number of figures were given as to the number and ratio and character of the hospitals of the country, Dr. Edward Martin, of Philadelphia, who has done so much for the hospital and medical progress of Pennsylvania, took up the topic. He said something of what Pennsylvania has done under the administration of Dr. John M. Baldy. He did not say that he himself had had much to do with the propaganda for better standards in his state, and he did not tell of his part in the creation of the Philadelphia Hospital Council and the wonderful work which that coun-

cil had done in advancing various standards in hospital practice. He did say, however, that he thought the medical profession had been largely responsible for hospital betterment during the past decade by reason of its demands for the better care of the sick. He gave a very graphic story of the development of the hospitals of this country, beginning with the basic principles of pronounced charity and going through the communal and city hospitals, the state hospitals, and then what he was pleased to term the altruistic hospitals. Some of the greatest gifts that had been made to hospital development, he said, were from men and women, very miserable themselves, in point of health, who were hoping by gifts of money to make life less miserable for others. Then he spoke of the teaching hospital, in approach to the medical school; he thought there had been very great improvement made, due to the necessity of the schools for teaching material, and with the necessity for teaching material the necessity to use better methods for the care, cure, and comfort of that "material." He spoke also of the scientific research hospital, qualifying his appraisal of this institution by a hint that sometimes in the enthusiasm for research the medical men, as well as the hospital, had forgotten the sick man and had thought only of the use of him in the general cause.

Dr. Martin's last and final development of the hospital was as the private institution, and he here paid a glowing tribute to E. C. Codman, of Boston, and the contributions he had made in the interest of the sick, in his demand for "end-result" data and the fixing of responsibility in the treatment of patients. In the final evolution of the hospital, Dr. Martin resolved his appraisal into terms of dollars and cents, since he thought that nowadays the life and health of a man might be considered almost as valuable as the life and health of a cow. Dr. Martin quoted an authority who said that the young medical man emerged from school actually worth only twenty percent of his potential value to the community and that an additional percentage could be added to his value by postgraduate training in a good hospital; he thought that by improving the standards in the hospital the percentage of value to the community of this young medical man could be immensely increased. Dr. Martin also spoke of hospital superintendents and the need to train them because he thought the superintendent was the most vital factor in the efficiency of any hospital; he advocated one or more schools in this country for the clinical training of hospital administrators—a recommendation that promises to be developed in the program of hospital standardization by the American College of Surgeons in some definite way. More specifically, Dr. Martin urged that arrangements be made, against the declaration of peace for the intensive training of some of the young medical men who will be coming home from the war—training in executive work, in hospital administration. Dr. Martin urged medical men as the hospital superintendents of the future, because it was his idea that the superintendent was a man who should conduct the hospital and not the board of directors, and it was his idea that if this man were a medical man who had had careful training in a school for hospital administrators he would be able to give the medical practitioners in the hospital what they needed for their patients. Dr. Martin also spoke of the great need for complete and proper records of cases—if the hospitals are to be improved.

#### DR. OCHSNER GETS DOWN TO BUSINESS

Dr. A. J. Ochsner, in that decisive way that he knows so well how to employ, proposed the following resolution:

*Resolved*, That a committee be appointed to report on next Friday afternoon, at a meeting of the American College of Surgeons, in the fullest practical detail, on the organization of a school for the training of hospital superintendents; that Dr. Edward Martin be made a member of this committee, and that Dr. Bowman, who had done so much for the inauguration of the work of standardization, be made chairman.

This resolution was unanimously adopted and the appointment of the other members of the committee was deferred.

Dr. James E. Moore, member of the faculty of the University of Minnesota Medical School, Minneapolis, said that the hospitals of the country were "bad enough, God knows," but he was quite optimistic and gave a very graphic picture of the improvements that had been made in the hospital world in his own professional day. He told what the hospitals were thirty-five years ago, when they were hospitals "only by courtesy," very inferior boarding houses for the sick. Then he compared these hospitals with the present-day City Hospital of Minneapolis, with its 700 beds, and with the hospital of the University of Minnesota Medical School, "one of the most complete little hospitals in the world." Dr. Moore thought it would be quite as easy to standardize hospitals as it was to standardize medical men, and speaking for his own state and the work that the University of Minnesota had done, he was quite sure that medicine and medical men had been measurably standardized. Dr. Moore paid a high compliment to Dr. L. B. Baldwin, superintendent of the University of Minnesota Hospital, who, he said, was a positive "joy" and very much alive to the needs of the medical men practicing there.

Dr. Edward P. Davis, of Philadelphia, spoke of how the board of licensure of his state had served the whole country by placing on the statute books a provision that every general hospital should maintain a maternity service, which carried with it a provision that every resident doctor, intern, and nurse, qualifying in the hospitals of the state, should have an adequate training in maternity work. He thought that provision, if adopted elsewhere, would do more for the conservation of health and life than almost any other one thing that might be mentioned.

#### SMALL HOSPITALS HAVE A SPOKESMAN

Dr. Edward Jackson, of Denver, said he thought that any proposed scheme of standardization should keep in mind the best good of the great proportion of the 8,000 hospitals that had been mentioned earlier in the day—hospitals which were very small, which were increasing very rapidly, and which were extremely serviceable to their communities. Dr. Jackson would not minimize the influence a well-trained, conscientious superintendent could have on his hospital, no matter what the other personnel might be, but he thought also that very many hospitals were extremely weak in the matter of their medical staffs; a very common fault, in his opinion, is a "large, irresponsible staff that is in no way organized," and he thought that any scheme of standardization should take into account the training of the superintendent, the character and number of the medical staff, with relations to the number of beds in the hospital, the organization of that staff, and should also include definite requirements for case records.

#### PACIFIC COAST HAS NO STAFFS

Dr. Andrew S. Lobingier, Los Angeles, Cal., apologized for the fact that on the Pacific coast there were practically no organized medical staffs in hospitals. He thought that was due to the fact that the country was new and in more



or less of a chaotic condition, and to a pretty widespread feeling on the part of the people that hospitals are "hotels for the care of the sick." Indeed, he said that one of the largest hospitals of his own city, for the past ten years, had actually advertised that it was a hotel for the sick. He thought that different communities had different problems, and these problems would have to be met in different ways; he knew perfectly well that the prevailing idea on the coast, that the hospitals were hotels for the sick, was wrong, but he was sure it would take time, education, and great effort to overcome that attitude.

Dr. William H. Wilder, of Chicago, a professor in Rush Medical College, thought it was anomalous that medical schools should require a fifth or hospital year before graduation unless there was a stronger medical control of the hospitals in which this fifth year should be employed. He thought that not only was it necessary to standardize the hospitals in which interns were to get their posttheoretical training, but that the fact that medical schools would be able to discriminate between hospitals and send their graduates only to those that fulfilled the necessary requirements, would go a long way toward raising the standards in all the hospitals, since all hospitals needed interns and would want to meet conditions necessary to obtain them. Dr. Wilder thought the day was at hand when hospital superintendents must of necessity be men and women of medical training who could assume an attitude *en rapport* with the whole system of medical education.

#### LAYMAN URGES MEDICAL SUPERINTENDENTS

Mr. Daniel D. Test, of Philadelphia, always happy on his feet, said that from the Rooseveltian standpoint he was an "undesirable citizen" in that he was a hospital superintendent and not a medical man; he wished he were a medical man, not only because he would be a better superintendent if he had medical training, but because he could get a much larger salary for the thing he was doing today. He spoke heartily in favor of the organization of a school for the training of hospital superintendents; he believed in the idea, but he did not think that it ought to be understood that competent hospital superintendents could be made entirely by attending school. He referred to Dr. Martin's "twenty percent efficient young medical graduate," whom it had taken four years of intensive study to bring so short a way toward efficiency, and he did not think that very many men or women who had finished medical school could be induced to take another four years of hospital training. But he thought the school would do a lot of good and give the finishing touches, or at least vastly improve the qualifications of men and women who had already had some actual experience.

#### WHEN A DOCTOR'S PATIENT DIES

Dr. Philander A. Harris, Paterson, N. J., thought that the medical man, and more especially the surgeon, should have a larger voice in the settlement of the administrative problems in the hospitals in which their patients were being cared for. For instance, a doctor has operated on a patient and has done what he considers a good job and one that promises a good result; and all of a sudden, and without any apparent cause the patient dies—because of something over which the operator had no control, as, for instance, the asepsis or the nursing, or some feature of the after-care. He thought that control over that patient, on the part of the surgeon, should have extended and reached out to the nurses, to the assistant physicians, and to all the clinical assistants. He thought any scheme of standardization would be inadequate that did not fully cover this

point, and he pointed to the manual of the United States Post-office department, in which a rule of action was appointed for every detail of every incident that could happen in every bureau and every department.

#### STANDARDIZE DOCTORS FIRST

Dr. H. G. Wetherill, of Denver, thought that the American College had taken up this matter of standardization in the proper sequence since it had begun consideration of better hospital standards by attempting to establish some standards for the surgeons themselves. He thought it would be practically impossible to standardize the hospitals until some veto power could be exercised over the medical profession to keep out incompetents and to limit certain men to work that they were actually capable of doing. He was quite sure that a beginning had been made in this direction by the College in its attempts during the past two or three years to fix the qualifications of an approved surgeon. He thought there was entirely too much freedom nowadays in most states in permitting almost any man who was a graduate in medicine to do anything in any hospital that he pleased to do, whether he was actually capable of doing it or not.

#### BEVAN'S STORY OF STANDARDIZATION

Dr. Arthur Dean Bevan, of Chicago, who did so much to bring about the standardization of medical schools, spoke of recent attempts on the part of the Council of Medical Education of the American Medical Association, during the time he was chairman of that council, to bring about the standardization of hospitals. Dr. Bevan spoke of the appointment of state committees by the council to study and report on progress in standardization in their several states. He said that some very good work had been done by the members of the council, and some very excellent reports had been made from year to year, but that after these reports were made practically nothing was done again for the next three or four days, and until another very excellent report was submitted. Dr. Bevan thought the most important thing in medicine in this country today was this one of the standardization of hospitals, and he advised the creation of a permanent organization to handle the matter—a recommendation, by the way, which was acted upon at the close of the meeting by the creation of a general committee of twenty-five. He thought there should be a permanent salaried secretary engaged to handle this work, since it was his experience that some one individual must be definitely charged with the responsibility for what was done. It was fortunate, he believed, that the American College of Surgeons had a considerable fund which could be devoted to the study and solution of this problem. Dr. Bevan thought the next thing to do was to bring together all factors interested in the problem of hospital standardization, not only the American College of Surgeons, but the Association of the American Medical College, the state licensing boards, the American Medical Association, and the various hospital associations. Standardization, he thought, was not a surgical problem, but it was a problem of vital interest to all men engaged in all branches of the practice of medicine, and the whole profession ought to have those interested engaged in the work.

#### THE ADMINISTRATIVE CONSCIENCE

Dr. Edward Evans, of La Crosse, Wis., thought it vital to include in the factors looking toward standardization the ideal of an administrative conscience and, to illustrate, told the story of a medical man in an operating theater of a hospital, who, while waiting for his patient to have a

Cesarean section operation, indulged for so long a time in an amusing story leading up to the operation of the day that the intern had come in and had reminded the operator that unless he hurried up, the woman would be delivered normally. He did not blame the surgeon quite so much that a thing like that could happen as he did the hospital. He thought that if there had been an administrative conscience in that institution such an incident could never have occurred. Dr. Evans thought it was little short of criminal that in some hospitals any member of the medical profession in the community could do just about what he pleased and as he pleased.

#### The Afternoon Session

It was decided best to have the three papers of the session read first, that of Dr. John Young Brown, of St. Louis, on "Organization and Efficiency"; that of Dr. Francis Carter Wood, of New York, on "The Laboratory"; and that of Dr. E. A. Codman, of Boston, on "Case Records and Their Value."

Two of these papers appear elsewhere in this issue.

#### THE EFFICIENCY ENGINEER IN THE HOSPITAL

Dr. Robert L. Dickinson, of New York, spoke on his favorite topic of reducing hospital administration and even surgical practice to terms of efficiency engineering. He spoke of the Taylor Association and its work in undertaking to standardize institution efficiency. Later on, when someone taxed Dr. Dickinson with the impossibility of standardizing, for instance, a surgical operation, and reducing it to a matter of mathematical motions, he insisted there were certain details in surgery that could be properly standardized. He thought, for instance, that Crile's tying of a stitch could be standardized and shown in motion pictures and reduced to so many motions. Dr. Dickinson spoke of the necessity of having a clerk who duty it would be to keep accounts of standardized details in hospital efficiency. One principal feature of Dr. Dickinson's discussion was insistence on the reduction of the number of services in the hospitals of the country. He thought, for instance, that under medicine as a main service should be neurology, dermatology, and any other medical specialties, and that under surgery all surgery should be listed, and that the surgical staff should be responsible for all the surgery.

Dr. J. Garland Sherrill, Louisville, Ky., suggested the appointment of a committee, with Dr. Codman, at its head, to formulate a standard case record, and asked that the meeting take some action on it.

#### HOSPITAL BOARDS SHOULD BE EDUCATED

Dr. Edward N. Brush, of the Sheppard and Enoch Pratt Hospital, Towson, Md., gave a concrete instance, out of his own experience, in which the troubles of a hospital were due to inexperience and want of information on the part of the board of trustees. He thought that the fixing of standards would be very much easier if a propaganda to educate hospital boards was instituted. Most of these trustees, he said, were business men; it is the habit of business men to think in terms of dollars and cents, and they would have to be educated out of that attitude if they were to deal properly with hospital problems.

Dr. Brush also had a word to say about hospital superintendents: he believed it was quite impossible to train hospital superintendents in any school, as proposed in Dr. Ochsner's resolution early in the day; he thought that a far better way would be to engage the interest of the administrators of a large number of the larger and better

hospitals and get them to take into their institutions a certain number of promising young men and give them the actual experience of hospital work itself, and as a regular business.

Dr. Frederick W. Zimmer, Rochester, N. Y., told what Mr. George Eastman had done for Rochester through the agency of the Rochester Municipal Research Bureau. A complete survey of the hospitals of the city had been made and a voluminous and splendid report submitted, at the end of which many hospitals improved conditions in many of their details of administration. Mr. Eastman himself had paid for vast improvements in at least three of those hospitals. Dr. Zimmer thought the report would be of great interest and help used in connection with the proposed standardization throughout the country.

Dr. Cleveland H. Shutt, hospital commissioner of St. Louis, thought that all of the activities of the American College of Surgeons, in regard to proposed standardization should center on boards of trustees. He thought that, if each hospital board could have an outside and disinterested statement as to its weak and strong points, the boards would quite often see to it that improvements were made.

#### MORE PAPERS READ

The discussion of the three papers above mentioned having ended, Dr. Allen B. Kanavel, of Chicago, read a paper entitled "The Educational Responsibility of the Hospital to the Profession and to the Community," and Miss Annie W. Goodrich, associate professor in Teachers College, Columbia University, read a paper on "The Trained Nurse." These papers are also published in this issue. At the end of the papers, Dr. A. J. Ochsner, of Chicago, opened the discussion. He said that these meetings were the culmination of a very long-standing dream of Dr. Bowman, director of the American College of Surgeons; he thought that with the enthusiasm and aggressiveness that Dr. Bowman himself would put into the work, it was impossible not to accomplish very much. He was quite sure that most hospital boards and administrators were waiting in expectation that some such upheaval was bound to occur eventually similar to that which had occurred in the standardization of medical schools, and he was also quite sure that when hospital boards were advised as to what they should do and where improvements could be made, they would be found ready to respond.

Dr. Ochsner thought it was highly necessary to find the "right man" to act as executive secretary in this work of standardization. He spoke of Bevan's work in the standardization of the medical schools, and he thought that a like masterly hand was going to be required to get any similar work done in the hospitals. Dr. Ochsner thought that if the immense amount of waste that was constantly going on in all the hospitals of the country could be measurably cut down, much money would be available to do the necessary things to improve standards.

Dr. Ochsner thought there were three points that ought to be emphasized in approaching the problem of standardization: (1) publicity; (2) staff members should be made to take a personal interest in the history-writing in their institutions, because in the preparation of good histories it would be found that many things were necessary to do for patients, and that not only would the histories themselves be better written, but the service to patients would be better in order to make the histories of greater value; (3) attention should be directed on the nursing service; an immense amount of education was required, mostly directed at the medical profession itself, if better nursing



was to be given, and with better nursing the whole atmosphere of many hospitals would be improved.

#### CALIFORNIA EIGHT-HOUR LAW

Dr. Henry S. Sherk, of Pasadena, spoke of the operations of the California eight-hour nursing law. He thought that the law had effected good in many directions and that there were some disadvantages; those interested, he said, were now engaged in the preparation of some amendments to the law which ought to greatly improve its efficacy. There was no doubt in his mind that the necessity for the law was the flagrant abuses of pupil nurses in the hospitals of the state; he mentioned instances in which pupil nurses were compelled to work for eighteen or twenty hours, and in which all the forces, including pupil nursing service, were commercialized for the financial benefit of the institution. He thought it was a mistake that the eight-hour law did not provide for the employment of pupil nurses as "specials"; very much of value in their education was lost because of this fact.

Dr. George K. Sexsmith, of Bayonne, N. J., thought that a very great mistake was being made in many hospitals of the country by prohibiting the inclusion of medical men in the boards of trustees; this exclusion of doctors on the board had resulted in the suppression of much information to which hospital trustees had a right. He thought that boards of trustees ought to know, for instance, the number of people who were dying in their institutions, and that the reasons for the deaths ought to be interpreted to the lay members of the board by competent medical members.

Dr. F. Gregory Connell, Oshkosh, Wis., spoke of the utilization of clinical material for teaching purposes in the small hospitals of the country. He gave instances in the state of Wisconsin in which teachers from the state university medical school had given demonstrations and lectures. These faculty members would go to the smaller hospitals in the state and give clinical talks, using material in the hospital; the experiment had been eminently successful, and he thought more of that work ought to be done because, not only would the visits of these men from the teaching centers give much of value to the local staff members, but such a visitor was there to bring with him many new ideas in hospital administration that would be of great value to the hospitals themselves.

Dr. R. W. Corwin, of Pueblo, Colo., said he would like to ask Miss Goodrich whether she thought it possible that pupil nurses might take their theoretical training, leading up to the practical part of their hospital work, before they came into the institution itself; he thought that if that were possible very much chaos in hospital routine would be eliminated.

In reply, Miss Goodrich said she thought that such studies as chemistry, anatomy, physiology, and household economics should be taught in the high schools before the pupil went into the hospital, and that very many things ought to be taught the girls in their own homes; if that were done the pupils would be very much better able to apply their knowledge in their hospital work, as, for instance, she thought that dietetics should not be taught as a detached three months' course in the hospital, but that it should run throughout the pupil's training, having relation all the time to the employment of special feeding in the treatment and cure of hospital patients.

#### Friday Night's Meeting

The meeting of this evening was given over to the reading of papers by Mr. Asa Bacon, superintendent of the Presbyterian Hospital, Chicago, on the general subject of

hospital efficiency, including a questionnaire proposed to be employed by personal investigators for the American College of Surgeons in the hospitals; a paper by Rev. Father C. B. Moulinier, president of the Catholic Hospital Association, on behalf of that organization and its activities; and a paper by Dr. E. P. Lyon, dean of the University of Minnesota Medical School, on behalf of the medical schools.

Mr. Bacon's paper was so well received by those in attendance on the meeting that it was decided not to submit it for publication until it had been reviewed and studied by the committee of twenty-five. The intention was then that the paper should be used as a basis for a questionnaire to be sent to the hospitals and to be later on used in the inspection of the individual institutions. The evening discussions and the papers of those who followed Mr. Bacon are so intimately connected that it would seem rather inexpedient to outline in detail the talks of the evening until the papers themselves are available for publication. Mr. Bacon's paper and the discussion of that evening are to be published in the January number of *THE MODERN HOSPITAL*. Suffice it to say just here that Mr. Bacon's paper went into the intimate details of management by way of questions calculated to bring out exactly what the institutions are doing and how they are doing it.

#### Saturday's Meeting

At the opening morning session, Dr. John G. Bowman, presiding, named the following committee in response to the resolution of the previous day, to consider a program for the proper training of hospital superintendents: The Surgeon-Generals of the Army, Navy, and Public Health Service or their representatives, Dr. Edward Martin, Philadelphia; Dr. Burlingham, St. Louis; Dr. S. S. Goldwater, New York; Dr. John A. Hornsby, Chicago; Father C. B. Moulinier, Milwaukee; and Dr. Allen B. Kanavel, of Chicago. This committee was instructed to meet and if possible to prepare a report for submission to the American College of Surgeons during the meeting the following week.

The chairman of the meeting spoke at considerable length on the subject of the practical approaches to the problem of standardization, as he saw it. He was for getting busy at once out in the states; he proposed that a state meeting be called by each state committee and that program for the state be outlined at the big get-together meeting. He wanted vim and fire and enthusiasm behind these state meetings; he wanted the right people invited. When the meetings were called, he wanted the whole problem of standardization brought out in the simplest form and discussed from the standpoint of the public health of the state as well as in the interests of the various groups responsible for the conduct of the hospitals.

Dr. Bowman thought that personal inspection of the hospitals in different parts of the country should begin at once and under the general auspices of these state committees. He thought the surveys could be made at first quite rapidly and that an immense amount of data could be collected in that way, and that in the course of the inspection the inspectors could plant seed that would keep the hospitals busy for several months improving things, so that by the next time the inspector came around, say in six or eight months, a good deal of the work of standardization would have been installed. He wanted it understood that this whole problem of standardization was based on a spirit of helpfulness and was not in any instance intended to hurt any hospital or any person or group of people. He thought that past obstacles to the establishment of standards had been largely the result of want of

proper information and proper data, and that when the hospitals themselves had the information that they needed and the standardizing body had the data it needed, the way would have been cleared for a rapprochement of all the groups in all the hospitals. He thought that one of the best effects of personal inspection of the hospitals would be on the public itself—that the public would be educated as to conditions in their hospitals and the means to better these conditions, and he thought that with the education of the public many means would come by which any expenses incident to improvement of conditions would be met.

Dr. Bowman outlined the work in detail, as he saw it, for the training of the hospital inspector who went into a hospital, including the tabulation of data, his talks with the superintendent and with the trustees and his conduct of the inspection itself.

Dr. Bowman urged publicity as one of the predominating influences on the whole problem of standardization. He thought it was fundamentally necessary that the meaning of the whole thing be stated specifically and from every angle to the public, and by the public he meant also state and county medical societies. He thought the public ought to be informed as to what standardization really meant and necessity for it; that newspapers and lay magazines of every sort should be interested; and that they should be asked to take up the question and help along with it.

Dr. E. S. Van Duyn wanted to know just exactly and more specifically what standardization was expected to cover. He had understood at one time that it was to cover the medical work and instruction in the hospital, but from Mr. Bacon's paper of the night before he gathered the impression that it was perhaps to go into economies in coal consumption and the engineering problem of the hospital, and he wanted some authoritative statement as to just what was proposed.

The chairman advised him that the one thing first of all is the care of the patient, and he thought that perhaps it might be necessary to confine the investigation to the problems in which the patient was directly concerned, but after all, if a hospital was to be efficient—and efficiency costs money—it was also necessary that every economy should be practiced in order that there might be funds available to pay for necessary improvements, and in that way he thought that eventually it would be absolutely necessary to take up engineering problems and economies and other technical administrative features.

There was a long discussion of hospital economies and whether or not these economies should be gone into in any proposed inspection for purposes of standardization. Dr. George W. Crile, of Cleveland; Dr. L. W. Littig, of Davenport, Ia.; Dr. Edward Martin, of Philadelphia; Dr. E. A. Codman, of Boston; Dr. Edward Evans, of LaCrosse, Wis.; Dr. Charles E. Bowers, of Wichita, Kan.; Dr. George B. Kunkel, of Harrisburg, Pa.; and many others taking part.

On Saturday night, at the close of the meeting, there was a splendid banquet at the Congress Hotel at which nearly three hundred visitors to the standardization congress were present. There were addresses by Dr. Crile, who acted as toastmaster; Dr. Homer Gage, Dr. A. J. Ochsner, Dr. W. D. Haggard, Dr. Edward Martin, Rev. Father Moulinier, and Dr. John G. Bowman.

A letter was read from Dr. Franklin H. Martin, who was prevented from being present by illness. The letter told something of the work of the American College of Surgeons, of its aspirations, of its ideals, and also told why the college was interested and deeply concerned about the standardization of hospital service. Great regret was expressed at Dr. Martin's illness. It is a pleasure to be

able to say that Dr. Martin had recovered sufficiently to attend one or two of the meetings of the Clinical Congress of Surgeons on the week following the close of the hospital meetings.

#### GENERAL COMMITTEE ON STANDARDIZATION

##### Director Bowman, of American College of Surgeons, Asks Aid of Surgeons and Hospital Workers

At the close of the hospital standardization session of the American College of Surgeons, recently held in Chicago, Director Bowman appointed a general committee, whose duties it shall be to advise in regard to the proposed standardization of the hospitals, as per the program of the Chicago meetings.

Director Bowman intends to call this committee together early in December at Washington, D. C. One of the purposes of that meeting will be to discuss and finally pass upon a questionnaire to be sent to all the hospitals, and to approve a plan of personal inspection that is to be submitted.

It will be noted that the committee takes in a number of groups—surgeons, internists, and hospital people, including the presidents of the American Hospital Association, and the Catholic Hospital Association. The names of the members of the committee follow:

#### GENERAL HOSPITAL COMMITTEE OF THE AMERICAN COLLEGE OF SURGEONS

The president of the College.

The general secretary of the College.

The director of the College.

#### Surgeons:

Dr. Charles H. Mayo, Rochester, Minn.

Dr. Allen B. Kanavel, Chicago.

Dr. A. J. Ochsner, Chicago.

Dr. W. W. Pearson, Des Moines, Iowa.

Dr. Fred Bates Lund, Boston, Mass.

Dr. J. Bentley Squier, New York City.

Dr. John M. Baldy, Philadelphia.

Dr. Robert S. Cathcart, Charleston, S. C.

Dr. Edward Jackson, Denver, Colo.

#### Internists and Laboratory Men:

Dr. Victor C. Vaughan, Ann Arbor, Mich.

Dr. E. P. Lyon, Minneapolis, Minn.

Dr. L. B. Wilson, Rochester, Minn.

Dr. Francis C. Wood, New York City.

Dr. William H. Welch, Baltimore, Md.

#### Hospital Superintendents and Others:

Mr. Asa S. Bacon, Presbyterian Hospital, Chicago.

Dr. John A. Hornsby, Editor of THE MODERN HOSPITAL, Chicago.

Dr. S. S. Goldwater, Mount Sinai, New York City.

Dr. Winford H. Smith, Johns Hopkins Hospital, Baltimore.

Father C. B. Moulinier, S. J., president of the Catholic Hospital Association, Milwaukee, Wis.

Dr. A. B. Ancker, president of the American Hospital Association, St. Paul, Minn.

Representative to be nominated by the Surgeon-General of the Army.

Representative to be nominated by the Surgeon-General of the Navy.

Representative to be nominated by the Surgeon-General of the United States Public Health Service.

#### The Value of Case Records in Hospitals\*

BY E. A. CODMAN, M. D., Boston.

The science of medicine is in an experimental stage. Every time treatment, whether operative, mechanical, or medicinal, is given, an experiment is performed. It is no less an experiment because it is made on the human subject. In every experimental science, records are made of each trial, giving all necessary details, and especially noting the result. Singularly enough, in these human experiments which we constantly perform in our hospitals, it is not usual to make special effort to see that the results are

\*Read at the Hospital Standardization Session of the American College of Surgeons, Chicago, October 19-20, 1917.



systematically recorded, even though the details of the operations or treatments may be written down in the clinical records. If we were using dogs in the numbers that we are human beings, there would be a great cry raised against our brutality for causing needless suffering. We should defend ourselves on the ground that these experiments were necessary to science, that they were carefully conducted and recorded, and that the victims' sufferings were minimized in every possible way. Curiously enough, the public does not ask us to be so particular about our fellow beings, and, as a matter of fact, we could not well defend ourselves on the ground that our clinical experiments are scientifically recorded and the results always noted and studied.

Old-fashioned physicians and surgeons will tell you that the science of medicine is still too imperfect to permit us to trust the public with the truth about the results or the complications incident to treatment. There has been a habit in the medical profession which even now is so justified by custom and usage that it is next to a moral law. This habit I will call "poetic license." No matter what they have preached in their lectures or written about scientific accuracy, all professors of medicine and surgery have by example taught students that, in actual practice, it may be right to conceal from the patient the truth about the case. In a way the public has forced this habit upon us. How often the husband and wife come to us separately, and each tell us to conceal from the other the fact that cancer is present in the one or the other! The victim tells us that the husband or the wife cannot bear to know the fact, and the husband or wife begs us to conceal the truth from the victim. I could carry illustrations of this habit of "poetic license" much further, but it is sufficient for us all, layman as well as doctors, to confess its existence. Clinical teachers make free use of it, and their students go into practice—and make free use of it. The question is, has the time come when we can face the facts in a truly scientific manner? Can we let others look at the results of our experiments? "The wise, old-fashioned physician" will tell you that it is not yet time, but the modern surgeon who can demonstrate success in perhaps 95 percent of his experiments is becoming ready to let the public be acquainted with the facts. Unfortunately, even now, the modern physician is not very keen for direct truth on the clinical side, although to the laboratory side he gives more scientific energy than does the surgeon.

If, however, we put considerations of human nature aside, we can take it for granted that in an experimental science it is important to make record of our experiments and especially of their results. The truth should be recorded even if expediency keeps the records under lock and key.

Case records are made for three purposes. The first we can call scientific; that is, to record the facts observed about the case, so that these facts may be in available form for so-called scientific studies, which the attending physician or surgeon or some other (qualified) person may make. Second, for practical purposes. For instance, if a patient has been in the hospital and returns for further treatment, we want to be able to find out what his condition was when he was in the hospital before, and what were the details of his treatment. The third use of records is for medicolegal purposes. The law requires some form of record, especially in cases of accident or crime.

It needs no argument to show that records should be made for these three purposes. In most hospitals there are some such records, however inaccurate and inadequate they may be. I wish to suggest a fourth use for case rec-

ords—as data to form a basis for study to increase the efficiency of the hospital.

It is a singular fact that this idea is a relatively new one. Heretofore trustees have been content to know that their patients have been *treated and cared for*. They have not concerned themselves with the efficacy of the treatment given. Each member of the staff has done the best for his patient that his time and conscience has allowed him to do, but each member of the staff, being in a glass house, has not cared to inquire into the efficiency of other members of the staff. As for the superintendents of hospitals, they have had more than enough to do to look out for their share of the work, without getting into hot water by inquiring into the results obtained by the physicians and surgeons. In fact, we must confess that it has been the duty of no person or department in most hospitals to inquire into the efficacy of treatment. The vague reputations which members of the staff earn in the hospital and in the community has been the only criterion. And in the making of these reputations personality dominates efficiency.

My own interest in hospital records is largely from this point of view of using them to increase efficiency. I advocate the end-result system of hospital organization which was recommended by a committee of the Clinical Congress of Surgeons<sup>1</sup>. This system is perfectly simple, the only difficulty with it being its revolutionary simplicity. It requires straightforward, truthful answers to these questions:

What was the matter with the patient?

What did the doctor do to him?

What was the result?

If the result was not good, what was the reason?

Was it the fault of the doctor, the patient, the disease, or the hospital organization or equipment?

Heretofore in hospital organization there never has been a bona fide attempt systematically to fix the responsibility for the success or failure of each case treated. I claim that our record system should enable us thus to fix responsibility, and that it should be *used* for this purpose. I claim that medicine is already enough of a science to enable us to use the great principle of comparison as in other sciences. Records we must have, clear, honest records, no matter how brief, if they fearlessly face the facts. If we do this, our records will be of more scientific value than at present. They will also cover the practical uses and the medicolegal ones. So far as the medicolegal uses go, this new type of records will perhaps be of more value in the execution of justice in general than to each hospital in particular. At present the community allows hospitals to evade medicolegal complications, but the time is coming when the hospital must take more responsibility and be able to show it is at least recording and analyzing the results of its experiments. The absence of a system to fix the responsibility for each experiment should be more culpable in the sight of the law than the failure of the experimenter to perform a carefully conducted experiment successfully.

In hospital organization, we may profit by the teachings of the modern science of efficiency engineering. The sixth of the twelve principles of efficiency demands the existence of reliable, immediate, adequate, and permanent records. "Reliable" includes the ideas of being accurate, honest, authoritative and complete. "Immediate" means available to those interested; practically indexed by name, disease and anatomic region; clear; brief or abstracted; easy to handle

<sup>1</sup>Surgery, Gynecology, and Obstetrics, June, 1914.

and to study. "Adequate" means being purposeful; for instance, quite different in a hospital connected with a university from those in a hospital in a mining camp, but accurate and fearless in both. "Permanent" means too valuable to lose; it also refers to the materials used in the making and to the importance of keeping the completed volumes under lock and key (recognizing human carelessness). Nevertheless, being permanent does not refer to perpetuating old faults. Harrington Emerson, in his chapter on records, says that it has not been unusual to find in the records of a corporation "a great variety of monthly tabulations, and when inquiry is made it is finally unraveled that twenty years before some president wanted a certain set of records, and his successor wanted a different set, which were started in parallel; that a third and fourth incumbent added their requests, but the old tabulations continue to be made and painstaking clerks work their monotonous lives away in neat compilation that no one has looked at, much less used, for a decade."

In the special subject of hospital records, the efficiency experts would need one more important adjective, and this is "educational." Perhaps they include it under "permanent." The young doctor must necessarily get his training in a hospital, and one important element in his training is in writing records. I have no fault to find with our attempt to make this combination of scientific records and opportunity to learn by experience, except to say that, today, in most hospitals I fear that the records are left *entirely* to the students and are not even signed by those actually responsible for the treatment and its results. In my opinion the member of the staff responsible for the treatment should at least O. K. the record before it is filed. A staff that is too busy to do this needs more help, and should not be allowed to corner the material of that hospital. The permanency of hospital records, if signed, would be an incentive for accuracy and efficiency for all concerned.

The committee of the Clinical Congress of Surgeons which devised the end-result system believed that it is possible to recommend a system of records which will be *the greatest common divisor* of all hospital records—a system so simple that every hospital, large or small, could use it. The larger the hospital, the greater its endowment or other facilities, the more elaborate the records might be, but, no matter how detailed, they would still be capable of being abstracted into the form of this greatest common divisor. Thus, a record in a small hospital might be directly compared with the *abstract* of a record in a great hospital. We felt that the important facts under the eight headings which follow *should be known about each case in all hospitals*. Brief statements of these facts would be the minimum amount that any record should contain. The more elaboration there might be in the details of such records, the more should the hospital be congratulated, but every hospital should have for each patient a uniform card comparable with that of every other hospital and containing besides name, address, etc., brief statements under the following headings:

1. A *permanent* address of some relative or friend who would forward mail a year or more later.
2. The symptoms or conditions for which relief was sought.
3. The diagnosis accepted as a basis for treatment by the person responsible for or giving the treatment.
4. The name of the person who took the responsibility of treating the patient or the names of those to whom he delegated important steps in the treatment.

5. The important points in the method of treatment, whether operative or otherwise.

6. The complications which resulted from, during, or after treatment.

7. The final diagnosis at discharge, authoritatively O. K.'d for index filing.

8. The result, when time has elapsed for this to be determined, or a brief annual statement of the patient's condition.

Our committee devised cards to be used for this purpose, and an index chart to which the numbers from the cards could be transferred in such a manner that the chart would be an immediate index to all diagnoses. The use of these cards for the analysis of errors and waste, in order to prevent similar errors and waste in the future; and also to ascertain the persons and methods to whom success in treatment is to be attributed, constitutes the end-result system of hospital organization. It inevitably will lead to publicity, and as is usual in publicity given to other important matters of vital interest to the people, it brings up the questions of special privileges, vested interests, economic advantages, trade routes, educational concessions, and the almighty dollar. Anyone who is interested in my personal views on these aspects of the end-result system will do me a favor by reading the report of my own hospital, a copy of which will shortly be sent to every member of the American College of Surgeons who cares for one. Besides my personal views on some of these subjects this report will contain a practical illustration of the use of the system.

#### Hospital Organization and Efficiency\*

BY JOHN YOUNG BROWN, M. D., F. A. C. S., Chief Surgeon, St. John's Hospital, St. Louis, Mo.

The title of this paper affords a very wide field for discussion. I shall limit my remarks, however, to a brief consideration of some of the recognized and fundamental defects incident to hospital administration as found in some of the hospitals in nearly all communities served by members of the American College of Surgeons.

One of the chief aims of this college is the elevation and maintenance of surgical standards. We hope to see the day when no man will be able to hold himself out as a surgeon in any community without possessing the necessary ability, education, and training which are required to produce a surgeon and which he would and should require of anyone about to operate upon himself or a member of his family.

To a certain extent, we strive to strengthen and purify our profession for reasons of pride and conscience; in addition to this, we all realize the fact that we are, together with those responsible for the conduct of hospitals, in the only true position to guide laymen in the selection of competent surgeons. We fully appreciate how helpless the majority of laymen are, even among the more intelligent classes, when it comes to the selection of one to render surgical service for them or their families in their hour of distress. The surgeon quite frequently sees examples of the lack of ability on the part of laymen to place a fair value on surgical competence. Hospital administrators are daily in touch with those who operate and are in position and should be able to gauge surgical values among the various operators coming to their institutions.

Hospitals are established for the purpose of rendering better service to the sick than they can obtain in their

\*Read at the Hospital Standardization Session of the American College of Surgeons, Chicago, October 19-20, 1917.



homes. The most successful hospital is the one which is conducted primarily from the ideal standpoint of the best professional service to its patients, and not from the business standpoint of hospital economics and financial deficit or surplus.

It is impossible for those in charge of hospitals to evade the responsibility conferred through the trusting confidence of the patient who enters their portals in the full belief that nothing improper or unwarranted will be permitted by the hospital authorities during his or her stay within its walls. Were it not for this almost universal feeling on the part of the patient, it is doubtful if our hospitals could exist. Do the hospitals in return meet the confidence of the patient with a full realization of their responsibility in every direction? Unfortunately, in most cases, we must reply in the negative.

Many hospital superintendents realize the necessity of being able to fully control the standard of treatment which patients in their institutions should receive. Only a few superintendents, out of the great number in our country, are today endowed with sufficient authority in this matter. Unfortunately, there are too few superintendents capable of exercising intelligent and judicious supervision in medical matters.

Primarily, the welfare of the patient in a hospital is in the hands of the board of directors or trustees. Their responsibility to the patient can be fulfilled only when they have provided a competent staff and conscientious superintendent, and have given them full authority to maintain the standards of all departments—surgical, medical, laboratory, nursing, commissary, etc.—on such a basis as they would desire, were they also to become patients.

At the present time the legal restrictions in the various states unfortunately are not sufficient to guarantee the proper standards of surgical excellence. The hospitals, however, are in position to refuse to become a party to other than competent and skillful work in the handling of the unfortunate sick in their charge.

A position on the board of trustees or directors of a hospital is a great public trust; that trust must be observed and realized to a greater extent, and it is our duty in every rightful manner to assist hospital boards and administrators to a full understanding of their responsibilities to the public. They cannot relieve their conscience with the inference that the treatment of the patient lies with the doctor's conscience and that they are to supply only the facilities for carrying out his work. Many board members must be enlightened upon this particular phase of their responsibilities. There can be no doubt that many board members would shrink from the knowledge of conditions within their hospitals, were they informed of the true state of affairs.

We know of several large hospitals where apparently successful administrators are in charge, but whose success can be judged, unfortunately, only from the economic standpoint. The purpose for which the hospital exists is not being met. Incompetent surgeons and physicians daily work within their walls, with the full knowledge of those in charge. Unnecessary and unskillful operations are performed, and many patients suffer unnecessarily and lose their lives in these "successfully" conducted hospitals. We know that this state of affairs exists widely and in hospitals of all religious denominations.

It is said that competent hospital administrators are in wide demand. Is this really true? Are boards of trustees fully aware of the conditions within their hospitals, and are they seeking men who will conduct their hospitals not only successfully from the standpoint of the hospital treas-

ury, but also for the welfare of the patient? I know of men fully competent who would accept such positions. I know of others filling such positions who, from our standards, are totally incompetent, yet whom boards of trustees would be reluctant to displace on account of their recognized ability to show, at the end of each fiscal year, a substantial balance in favor of the institution.

We of the American College of Surgeons should be satisfied only when our hospitals are conducted with the sole idea of what is best for the patient. Hospitals will furnish facilities satisfactory to us when this is met and when they will refuse to permit incompetent physicians to operate and treat patients within their walls. The plea is frequently made that the patient must be cared for and that the physician is the selection of the patient. This position is absolutely untenable, hence it is the duty of the hospital authorities not to shirk the responsibility of freely establishing the important fact that the physician in charge must be qualified for his work, and it is also their duty to decline to receive a patient when conditions as here outlined do not obtain.

Since the laity, by the very nature of things, expects these obligations to be discharged by the hospitals, why should not a properly conducted hospital, fulfilling its every obligation to the patient, make known to the community, through proper channels, its position in these matters and be rewarded by the increasing gratitude and confidence of its patients? Let me emphasize here that any hospital which is unable to advertise these facts to its patrons should either remedy the situation or discontinue its work. And since it is indisputable that there are few hospitals properly conducted which can finish the year with a surplus, it must be admitted that a financial deficit is more commendable than is a deficit of obligation rendered to its patrons.

The minimum of responsibility which the hospital may rightly assume is that which its board of trustees would wish any hospital to assume towards them as patients. Too frequently boards of directors carry their responsibility to the patient in a dual manner; they employ a superintendent to conduct everything but the medical department. The medical staff is but one department of his institution, and the competent superintendent or satisfactory administrator should know better than anyone else whether the patients in his institution are getting proper treatment.

It is our duty to inform boards of directors of the true conditions, to assist them in remedying these conditions, and to insist that they be remedied. If some directors can be shown wherein they are failing tremendously in the prime object of their institutions, I believe that the treatment of patients throughout the land will be materially improved. If, after every facility has been afforded those in charge of such institutions to see the true state of affairs, the hospital still fails to discharge its obligations to its patients and establish proper efficiency and organization, it may be necessary forcibly to impress upon administrators and trustees their vital responsibilities.

Dr. L. C. Carey, recently appointed superintendent of the new Alameda County Tuberculosis Hospital at Livermore, Cal., has been made acting medical superintendent of the Alameda County Infirmary, at San Leandro, succeeding Dr. C. A. Wills, who resigned to accept a commission in the army medical corps. Dr. Carey will direct both institutions until another superintendent for the infirmary is named.

### The Educational Responsibility of the Hospital to the Profession and the Community\*

BY ALLEN B. KANAVAL, M. D., Chicago.

The hospitals of this country owe their existence to the generous endowment of the public at large and the support of the members of our profession, and the time has now come to ask whether the institutions so endowed and so supported measure up to the standards demanded of them.

Hospital history demonstrates that there has always been a tendency to progress from the custodial and remedial institution to the teaching center. The Mohammedans maintained excellent hospitals at Bagdad, Damascus, and other cities, first custodial, later remedial, but with the passing years they became teaching hospitals, reaching their highest development in the magnificent Al-Man-sur at Cairo, well equipped with lecture rooms and other facilities for instruction. The European hospitals were custodial or remedial until 1745, when Van Swieten organized a clinic of twelve beds in the Bürgerspital in Vienna. Bedside instruction was first introduced into France by Desbois de Rochefort in 1741, although Guy's Hospital was established and teaching carried out in the wards in 1723.

In the New World, also, the hospitals followed the same educational line. The first hospital to be established was by Cortez in 1524 in Mexico. The Hotel Dieu was established in Canada in 1639; the first hospital in what is now the United States, on Manhattan Island in 1663. For many years these and other hospitals established were only remedial institutions; but soon the teaching hospital began to develop here also, finding full development during the nineteenth century in the magnificent hospitals founded largely in association with medical schools. With the onset of the twentieth century, however, the number of hospitals increased with amazing rapidity, located in every community, under new conditions, without the restraining influences of university life, yet, under the supervision of most competent physicians, an enormous potential power for medical advancement if properly directed.

This representative gathering from all parts of the United States has a right to ask if these institutions measure up to the highest ideals of hospital life and to formulate if possible plans for utilizing this great force in extending medical knowledge and securing for the public the most efficient service.

The educational functions of a hospital may be grouped in four divisions: first, as to interns; second, as to the staff; third, as to the profession at large; and, fourth, as to the community.

What should a hospital teach its interns? First, medical knowledge; second, ideals; third, thoroughness; fourth, imagination. It is the duty of the staff and hospital authorities to cultivate all of these. In an entirely praiseworthy desire to "get on" in his profession, the intern easily mistakes the form for the substance. He sees men with good bearing and poor training apparently successful in practice. He does not know that this is the logical result of our earlier poor system of medical training, and that our newer ideas and better training will inevitably relegate these men to an inferior place; that, while now they are apparently the recipients of the respect and confidence of the community, as the years carry them into the lane of cypresses, they will lose that respect and confidence which is the glory and happiness of old age. That there is too much carpentry in surgery and too great

slowness in medicine no one will deny, but that our profession or the awakened laity will tolerate it in the next generation is open to serious doubt. These facts should be impressed upon the intern. He should know that, in any community in which he may locate, competence, a full knowledge of the scientific principles of medicine and surgery, and an ability to apply them now constitute a *sine qua non* to a successful practice. Therefore, the hospital should be so equipped and the staff of such a grade that the intern may leave prepared in every way. He should be taught methodic history-writing and its execution should be demanded of him. Careful examination, physical and laboratory, should be insisted upon in every case. He should be encouraged to make independent diagnoses.

The imagination of the intern should be developed by favoring research. Research in fundamental branches may be a function of the medical schools, but clinical research belongs properly to the hospitals, and that hospital which favors it will find its efforts returned a thousand fold in the more careful work done by its staff and interns, in the general reputation the hospital will have in the community and in the confidence that will be reposed in it by the profession, the tangible result of which will be seen in the number of patients who will seek its doors. Meanwhile, the intern has been sent out to practice his profession with a medical training that assures him a practice, with an ideal that does honor to his institution, and an imagination that will enrich his life and perchance add something to the sum of human knowledge.

In this material age, care should be exercised to choose a staff wisely. Hospital trustees should realize that the possession of a large practice is not necessarily the badge of efficiency in our profession and that, if they choose their staff on the basis of income to the hospital, they may soon awake to a realization that the standard has been so lowered that the institution has lost the confidence of the profession and the community. With the general diffusion of medical knowledge, the laity is rapidly learning to demand a thorough training of the physician. Therefore the hospitals should anticipate the future and recruit their staffs from the most scientific of the profession.

Every hospital staff should demand and every hospital furnish all known equipment for diagnosis and scientific work. Hospitals originally took the place of the home in that the sick could be cared for better in a material way. Now a hospital is a diagnosis center, and every board of trustees should be alive to this new phase of institutional life. This demands chemical and pathological laboratories, generally with trained attendants, facilities for filing case reports, x-ray equipment, etc. As a protection to themselves, hospital trustees should urge post-mortems for all patients dying in the hospital, and the staffs should have the scientific honesty to support the demand. There is no surer way to weed out incompetents than this. It protects the hospital, the competent physician, and the community. Point me a physician who requests post-mortems, and I will point to a safe, able practitioner. Point me a hospital officially favoring and urging post-mortems, and I will prove to you that it is among our best institutions.

The relation of the hospital to the profession at large presents several unsolved problems, and the following suggestions may not be considered as practical now, but let us remember that we are building for the future.

The medical school sends the student from its doors

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with a diploma asserting that he is qualified to practice medicine—a polite fiction that we have accepted while at the same time belying our acceptance by insisting that the student should serve an internship. Beyond this neither the state nor his alma mater has gone. Any further knowledge the practitioner may acquire can be secured only through his individual practice, or by travel and study. But many members of the profession cannot leave their practices and must secure their development from knowledge brought to them. The public has contributed millions for medical school or hospital that accepts it tacitly agrees to fulfill that obligation. Does that obligation cease when the student leaves its doors?

The state brings every year new agricultural knowledge to the farmer's yard by means of traveling lectures and exhibit cars. Is the production of food of more importance than the preservation of health? Yet the physician must continue his education himself at great sacrifice of time and money. Should not the medical schools or the state, in addition to assuring the student a good medical foundation, follow the intern not only into the hospital and supervise his training there, but also into his chosen field and provide him with thorough extension courses, and cannot this further training of the practitioner be done best through these various institutions that are springing up in every community? All hospitals would be better for some university supervision and would certainly develop a higher function if they acted as the teaching centers for their communities. This would raise the standard of the hospital, center professional life about it, and develop the profession as a whole. This would necessitate an inclusive hospital instead of an exclusive hospital. Staffs should be chosen from the entire body of the profession for their teaching ability and their scientific training. The members should be considered as university extension teachers without special privileges in the hospital except those always accruing to special training and competence. This teaching might be done under the auspices of a parent university or the state.

The public has always had unstinted praise for knowledge, and in proportion as our profession demonstrates a real scientific spirit, the moral and material support of the community may be expected. No propaganda will be needed then to educate the public as to the fallacy of faith cures, osteopathy, or chiropractics, for the rise of which we ourselves are primarily responsible, in that they are the heritage of our aloofness from the public and the mystery with which we have clothed our profession. Science needs no mystery, knowledge no mask, and competence no propaganda. The laity must be taught by lectures and demonstrations under proper auspices. The public is more ready to help us and understand our problems than we have been to take it into our confidence. To win this confidence the staffs and the trustees of the hospitals must have the right ideals in medicine. Efficiency of the one and service divorced from material advantage on the part of the other must be our ideals. Dividends must be sought in scientific knowledge, in the cure of disease and the amelioration of human suffering rather than in dollars and cents. But let no one doubt that the latter will follow inevitably in the train of the former. The trustees are anxious and willing to do their part, but they must be taught the difference between a custodial and remedial hospital and a scientific hospital. The trustees and superintendent must cease to feel that their duty ends when they have provided food and beds for patients. Carpentry in surgery must end. Laxness

or laziness in diagnosis should be branded as a crime. The hospital must become a diagnostic and teaching center if it is to realize its highest ideals of service to the physician, the patient and the community.

### The Trained Nurse\*

BY ANNIE W. GOODRICH, Teachers College, New York.

The general agitation and the increased demand upon days already overfilled caused by our present international crisis have made impossible the careful study and analysis of the subject upon which you have asked me to speak. It is therefore with "a plain tale from the hills" of a long practical experience that I come at your request before you today, but if the conclusions of the unlettered agree in the main with the conclusions of those students of the subject whose scholastic ability is established by well-recognized academic degrees, then are the arguments rather weighty ones and not perhaps to be lightly thrown aside even if the readjustments their acceptance necessitates entail some temporary inconvenience.

Since the request was made in 1911 by the National League of Nursing Education that the Carnegie Foundation undertake a study of schools of nursing in the United States, encouraging and even notable advances have been made in nursing education; a more definite recognition of the professional status of nursing has been accorded by educators, the medical profession, and the public at large, while the inclusion in health programs, whether federal, state or municipal, of nurses in ever-increasing numbers establishes without question the social value of this public servant. It is not necessary to present to such a body as this illustrations of these facts, but one or two may serve to bring sharply before us changes that have come about so gradually as hardly to be fully appreciated even by those directly connected with the field. In a report of the year's progress of the University of Cincinnati, Mr. Rufus B. Smith, Chairman of the Board of Directors, says:

"The most important permanent change in the course of instruction of the university has been the making of the School of Nursing and Health of the Cincinnati General Hospital, a department of the Medical School of the university. . . . This enlargement of the sphere of university education finds precedent and justification in the University of Minnesota, the University of Indiana, the Washington University of St. Louis and Columbia University in New York City."<sup>1</sup>

And an added and interesting evidence of the changing attitude toward nursing as a profession is presented in an editorial in *Science* referring to the step taken by the University of Cincinnati as follows:

"The University of Cincinnati has taken over the School of Nursing and Health of the Cincinnati General Hospital and has put it under the immediate direction of the Dean and Faculty of the College of Medicine. The university has already been given control of the laboratories of the hospital and through its medical faculty is doing all the medical, surgical, and research work at the hospital. Appreciating the service rendered to the people of Cincinnati by the medical faculty, the city authorities requested the university to undertake the direction of the School of Nursing and Health also. The university will thus be responsible for all the educational and scientific work of the entire hospital and its various branches. When the new medical college building is completed, as it is expected it will be early next year, the work of the Medical College, the Pathological Institute, the School of

\*Read at the Hospital Standardization Session of the American College of Surgeons, Chicago, October 19-20, 1917.

<sup>1</sup>University of Cincinnati Record, July, 1917, p. 11.

Nursing and Health will be assembled in one place as they already are in one organization. Nursing will become a skilled and learned profession to a degree far beyond its present attainment. The advance of modern scientific methods of treating the ills of mankind has already forced the issue upon medical training. That inadequate preparation of nurses and exploitation of them by so-called training schools will be eliminated is an inevitable next step. A nurse should have a liberal and broad education, languages, history, and the social and physical sciences, and she, like the physician and dentist, should keep up with the developments in her own and allied professions. Carried out in this way, nursing becomes a dignified calling, demanding for success a comprehensive university training."<sup>1</sup>

These encouraging evidences of advancement unfortunately only emphasize the importance of an investigation or study of these schools, for it is not possible that such wide differences should be permitted longer to exist in the education of the members of a profession as are presented, on the one hand, by these schools of nursing that are integral parts of or closely associated with the universities, and, on the other, by the many hundreds of schools that are departments of hospitals the clinical material of which is represented by a bed capacity ranging from fourteen or less to several thousand; the faculty of which in only an occasional institution presents an adequate and qualified staff, being generally limited to two or three members who are also charged with the administration of the institution, a force inadequate for the protection of patients whose care is rendered by a student body; whose curriculums are as varied from the standpoint of subjects and the hours allotted to them as are the general educational qualifications of the students who are to be prepared for a professional life by this content of education, and furthermore is imposed upon by a nine, ten, or even twelve-hour working day. We do not believe that, outside of the state of California, there are a dozen schools in the whole United States that limit the working hours of their students to forty-eight a week, although it has been proved to be economically, socially, and physiologically unsound to impose longer hours than these, not upon students, but upon men and women in the occupational field. In the light of the hours of labor still required of the student nurse, it is interesting to find an Englishman, at a time when the terrible depletion of the laboring force of Great Britain would have seemed to make necessary a doubling of the hours of labor, arguing for a six-hour day as the logical consequence of "the new understanding that it does not pay to overwork people."<sup>2</sup> This overworking of students would not be so extraordinary if it did not occur under the jurisdiction of the institutions of the community whose one concern is health. The fact that seventy-seven hospitals are conducting schools in California with the working hours of the student nurse limited to forty-eight a week is conclusive evidence that these hours are possible.

#### NUMBER OF APPLICANTS

The recent efforts, because of the war situation, to interest young women in entering schools of nursing, have been successful beyond all expectations. Literally, hundreds have sought for admission to our leading schools within the past few months. The Presbyterian Hospital in New York in the two months following the announcement of a course in connection with Columbia University

received 800 letters of inquiry, and, while it is possible that the connection of this school with the university and the credit to be given of an academic year for certain courses in the sciences to college graduates might in a measure explain the large number of applicants, it does not wholly do so, for a report from the Johns Hopkins Hospital shows 976 letters of inquiry in the past four months, not including many from college graduates, asking if any shortening of the period of training was to be made, and it is further reported that a large percentage of those asking for such credit later sought admission for the regular course of three years. The tragic fact—and tragic is not too strong an adjective to use today in this connection—is that, despite the many schools whose need of pupils is such that they are accepting applicants whose general education falls to or below the eighth grade, these would-be students with high educational qualifications are lost to the profession, because, even if referred to these schools, they are intelligently unwilling to accept the conditions they find there and the kind of education offered.

We are therefore deeply grateful to learn that it is the intention of the American College of Surgeons to include in their program a study of these schools, believing that such study cannot fail to hasten this greatly needed standardization of nursing education.<sup>1</sup> A very superficial analysis of the data presented in the "Survey of Schools of Nursing" issued by the California State Board of Health,<sup>2</sup> cannot fail to remove all doubt, if there be such, of the great need of this investigation. So closely does the information contained therein coincide with that furnished by the reports of the past nine years of the educational department of the schools of nursing in New York State that we are of the opinion that the conditions in the schools in any state would not materially differ except in one respect, namely, the universal provision in California of the forty-eight-hour week already referred to.

The most important questions to bring to your consideration today we believe to be:

First, what is the function of the nurse? and

Second, what content of education will equip her to fulfill this function?

#### THE FUNCTION OF THE NURSE

We conceive the nurse to be a remedial agent whose services calling her to all classes of society at frequent intervals and in intimate and prolonged association, is thereby afforded an almost unlimited opportunity for health education, which is the keynote of preventive medicine. This educational opportunity of the nurse is briefly but strikingly presented by Mr. Howk, of the Metropolitan Life Insurance Company, who says concerning the nursing service offered to their policy-holders for acute sickness and maternity care:

"It can be readily appreciated that a corps of trained nurses who make visits to 9,000,000 people a year are likely to exert a powerful influence in the education of these people in matters pertaining to their health"<sup>3</sup>

The number of people reached today through other agencies is many times 9,000,000.

In some of the fields to which the nurse is now called

<sup>1</sup>I am not attempting to discuss in this brief paper the frankly commercial schools known as the short course or correspondence schools, though they are, from the fact that they are turning into the field of nursing many hundreds of women yearly, a force to be reckoned with, and therefore should be included in any investigation of schools of nursing.

<sup>2</sup>"Survey of Schools of Nursing and List of Accredited Schools," California State Board of Health, March 3, 1917.

<sup>3</sup>Howk, H. J.: "The Public Health Work of a Great Life Insurance Company," *the Am. Rev. of Tuberc.*, August, 1917, p. 380.

<sup>1</sup>Training School Administration and University Schools, School of Nursing and Health at the University of Cincinnati, Science, July 28, 1916, editorial, p. 126.

<sup>2</sup>No place in Great Britain for Idlers, *The Survey*, October 6, 1917, p. 21.



her function is almost limited to education, as, for instance, under the tuberculosis division of the departments of health or as school nurse, but we contend that the value of the nurse in the general field as an educator is quite as great, if, indeed, not greater. Who, for instance, would perform the wider service in preventing mental diseases, the general nurse who sees and understands the tendency toward mental deviations in the child, or the mental nurse who is called only when these tendencies have developed into a mental case? Is the instruction given by the tuberculosis nurse to the tuberculosis patient and the surrounding family (which she does not reach until the family have been exposed for months) of greater preventive value than instruction by a well-informed general nurse who finds her way into the insanitary tenements before tuberculosis has invaded them?

Conceiving, then—and we think there will be no disagreement on this subject—that we have in a corps of workers as numerically large as is the body of nurses a powerful instrument for the dissemination of knowledge concerning health and thereby for the prevention of disease, what shall be the educational preparation of this body and where shall it be obtained?

#### THE CONTENT OF NURSING EDUCATION

We are quite familiar with all the arguments relating to the impossibility of including in a three years' course all of the sciences required for a sound educational foundation and all of the specialties a knowledge of which, if it were possible to obtain, would of course be desirable. We do not believe that the scientific foundation should be left for these three years. We heartily agree with the emphasis which Mr. Pritchett, in his introduction to the study of medical education in Europe, places on the necessity of close co-operation between all institutions concerned with education. Indeed, much that he says concerning medical education may be well applied to nursing education.

"Not only," he writes, "is the whole civilized world today bound together in the discussions of all questions of scientific, educational and social progress, but also the people of a given nation are bound together by their common interests in such questions. Education in any nation is one thing, not a series of separate and unrelated things. Under modern social conditions a nation will therefore inevitably lack not only industrial power, but also social contentment and efficiency, if it fails to conceive its various educational difficulties as fundamentally a single problem to be worked out by the institution related in the most vital way to one another and representing together a national conception of progress and betterment."<sup>1</sup>

Concerning the value of the sciences to the medical student he says:

"Teachers of medicine readily admit that for students who have really mastered their elementary physics and chemistry and biology, medical education becomes a wholly different thing from what it is for those who have not gained that foundation, not only because the man so trained can begin at a different point, but also because he is familiar with scientific concepts, scientific nomenclature, and scientific methods of reasoning."<sup>2</sup>

How closely this relates to Lillian Wald's beautiful but practical conception of the function of the nurse of today:

"Many there are, it may be, engaged in the routine of public health work, who have not crystallized for themselves the import of their task. They are sturdy soldiers, who do not ask the reason for the command. But there

are also prophets among the nurses and among the students of social movements who see the veil lifted and who know that the great army of nurses is educating the people, translating into simple terms the message of the expert and the scientist."<sup>3</sup>

We do not believe that any longer students should be permitted to enter schools of nursing who have not completed the course in a secondary school or a recognized equivalent.

Both in the secondary schools and the colleges we find courses in the sciences social and physical which might well be considered necessary to demand for the would-be student in nursing. One state, California, is already making such demands. Even so conservative a college as Vassar has provided for students, many of whom have not as yet determined and perhaps are never going to determine upon any vocation in life, courses the subject-matter of which should be part of the knowledge of every graduate in nursing, but which is part of the knowledge of only an insignificant few. Permit me to present one or two outlines that are particularly striking.

*Advanced Human Physiology.*—"Three lectures and four hours of laboratory work weekly. Lectures, recitations, special topics and their discussion, special readings, the microscopic examination of tissues, dissections and experiments. The laboratory is well equipped with anatomical models and the Harvard physiological apparatus for practical demonstration."<sup>4</sup>

*Metabolism.*—"This course includes discussion of processes of metabolism with corresponding experimental work in the laboratory, detailed experiments in physiology, of digestion and excretion, experimental tests of renal function, study of muscle metabolism, discussion of the physiological value of the various elements of food compositions, accompanied by experiments in special diet in the laboratory."<sup>5</sup>

*Hygiene of the Child.*—"This course comprises prenatal care, infant development and care, development and care of the child to adolescence."<sup>6</sup>

*Municipal and House Sanitation.*—"The principles of modern sanitation, including such subjects as water, sewage and garbage disposal, construction of habitations and the hygiene of transmissible diseases."<sup>7</sup>

*Charities and Corrections.*—"Sociological bearing of natural selection, heredity, environment, physical, physiological, psychological, moral, and social causes of abnormality, statistics of the causes of pauperism, history of the English Poor Laws, private relief, charity organization, public relief, almshouses, relief for the unemployed, including labor colonies and the tramp problem, dependent children, relief of the sick, insanity, statistics of the causes of crime, criminal anthropology, prevention of crime, principles that should govern the treatment of offenders, delinquent children, reformatories, prison methods."<sup>8</sup>

Concerning the practical experience, since the strength, such as she had, of the nurse has been directly attributable to her close and constant association with the case, this to my mind is perhaps the most important matter for our consideration. Not for worlds would we lose that priceless treasure which educators in other professions and vocations are seeking for their students, the practice field. The era of the *trained* nurse is drawing to a close. She will appear in the near future only in the history of the rise and fall of the apprentice system; but if history presents a faithful portrait she will be found there as an outstanding example of the value of a close relation between the student and the practice

<sup>1</sup>Address of the President, National Organization of Public Health Nursing, Convention at Atlantic City, June, 1913.

<sup>2</sup>Vassar College Bulletin, Vol. VI, No. 3, 52d Annual Catalogue, 1916-1917, p. 118.

<sup>3</sup>Ibid., p. 119.

<sup>4</sup>Ibid., p. 118.

<sup>5</sup>Ibid., p. 118.

<sup>6</sup>Ibid., p. 64.

<sup>1</sup>Pritchett, Henry S.: Introduction, The Carnegie Foundation for the Advancement of Teaching, Bull. No. 6, p. xi.

<sup>2</sup>Ibid., p. ix.

field. Despite many opinions to the contrary, I am willing to assert unhesitatingly that a proper division of the three years and a careful study and provision of the number of cases per student, that will provide a sufficient body of experience in the branches determined to be essential, will make possible the inclusion of all the important services in the nurse's experience, not, however, to the extent of preparing her for specialization; but the inclusion of these services will necessitate the requirement of courses in certain sciences already obtainable in high schools before admission to the school of nursing and the elimination of household duties the required experience in which could also be provided through a prevocational course.

What shall be deemed the essential branches must be determined by a study of the needs of the community, not by the branches found in any given institution. We are all familiar with the fact, which was somewhat astonishing to the public when first revealed, that greatly as the hospital capacity has increased in the past decade, it nevertheless cares or provides for but one-tenth of the sickness in any given community, city or town. This fact in its relation to the subject now before us gives rise to several questions. First, does this one-tenth that finds its way to the hospital represent the sickness problem of any given community, or only those ailments that can for certain reasons be best cared for in an institution? Second, shall the emphasis in the nurse's training be placed on those branches of diseases with which she comes in contact during her two or three years in the particular hospital in which she is trained, or those branches with which she is to come in contact during her professional life in the community? Third, and perhaps the most important question: which branches from the standpoint of the health of the community is it most important for health workers to be informed upon and to attack?

The survey of the hospitals maintaining schools of nursing of any state present the majority as dealing mainly with surgery and with an ever-increasing private patients' service, the latter not a good teaching field. It also presents a number of special hospitals giving two or three years in their specialty. The survey of any community in the United States presents a higher infant mortality than is necessary, a maternity mortality that places this country the fourteenth on the list, a tuberculosis mortality that is higher than the maternity mortality, a rapidly increasing number of mental cases,<sup>1</sup> and frequent outbreaks of communicable diseases. Nor does the war emergency reverse this situation as at first it promised to do. Reports from the other side show tuberculosis, infant mortality, venereal diseases, mental and nervous disturbances to be even more terrible concomitants of war than the injuries that relate to surgery; all of the evils that are being struggled with in civil life increased many times call for large numbers of nurses who are experts in these fields.

There is no reason why, because two-thirds of the service of a given institution is surgical, two-thirds of the student's time should be given up to that service. Just so much of that service expressed in numbers of cases and in weeks of experience should be used for the student as is required for that branch of the course, and provision should be made for the care of the remainder

of the cases by a graduate force, or, if needed, for the students of other schools by such students.

In view of the fact that the curriculum issued by nearly every hospital maintaining a school of nursing almost invariably includes lectures and recitations on all of the branches of disease, it would hardly seem necessary to emphasize the importance of theoretical instruction in connection with this practical experience. But what is the relation between the theory provided and the practical field? An arrangement whereby in any school or college the laboratory work in chemistry, biology, or kindred subjects, was given in one year and the lectures in these subjects in another would be considered too extraordinary to discuss; yet just this method obtains in schools of nursing. For instance, the course in pediatrics may come in the second year, the lectures and recitations in the third. Or, it may be that the student is attending her lectures on surgery while she is obtaining her experience in the medical wards. It will be contended that it is impossible to arrange otherwise. It is under the present system, but that only emphasizes the absurdity of the system. When a school affiliates with another hospital, whether it be for a course in obstetrics, pediatrics, mental disease, or medical nursing—and such affiliations are very frequent today—it is expected that included in the course shall be lectures and recitations in these subjects, and usually these are arranged for. If not, the school sending its pupils considers seriously and quite justly severing the connection. We therefore contend that the readjustment required is possible; such readjustments mean, however, that no more than the school of medicine may be carried on without an endowment, and as a department of a hospital can a school of nursing any longer be carried on without such an endowment or as a department of a hospital. While the University of Cincinnati presents a wonderful picture of what a school of nursing should mean, the Harvard University presents an equally good picture of what a school of nursing might mean and does not. Grouped around the Harvard Medical School is a splendid set of buildings, modern in construction and equipped and representing most of the branches of disease a knowledge of which is not less important for the nurse than for the medical student. Nothing less than a university school of nursing a part of, if we like, or under the Harvard Medical School, would be expected today, but such is not the fact. Two of the hospitals maintain their own schools, and the work in all of the other institutions is mainly carried on by student nurses, but not from these two schools. None of the students in any of these institutions have the benefit of all the variety and richness of the clinical material which could so easily be available for them. It is incredible that a city of such vast resources and of such high educational standards as Boston should not yet have conceived that to make possible a Harvard school of nursing where all the splendid opportunities of the university should be available for the body of women who are rendering such conspicuous public service throughout the country today would mean to increase their efficiency almost an hundredfold. What a waste of human ability, what a waste of communities' moneys does their failure to do this represent!

How many tenths of community sickness receive inadequate or unskilled nursing care in order that one-tenth may be provided with a free nursing service, and what is the cost to the community of this inadequate and unskilled care are, we believe, important questions to be answered

<sup>1</sup>In 1915 there were in the hospitals having registered schools in New York State 53,031 beds, in the general hospitals 15,088, in the 15 state hospitals for the insane 37,943, an increase over the previous year of several thousand.



through the proposed investigation. What part of the burden of the nurse's education should the hospital assume, the school assume, and the nurse herself meet is another. The hospital cannot, in justice to the purposes for which it is erected, carry the whole burden of the professional preparation that the field of nursing demands today, but, if it cannot do this, then it should not attempt to maintain a school.

I have obtained from Miss Nutting, of the Teachers' College, the privilege of submitting with this paper her outline relating to the investigation of conditions of nursing education in the United States and the practical results that such an inquiry might produce that seem to very thoroughly cover the ground. I wish, however, to emphasize the importance of a thorough analysis of the actual case experience of the student. It is a not insignificant fact that, while records of efficiency, records of nursing procedure and ward services were easily available, there was not a record found two years ago throughout the length and breadth of the United States that showed the actual case experience of the individual students in any school. Indeed, the information relating to the student's experience often suggests that the physical structure of the hospital rather than the physical being committed to its care is the important factor in the nurse's education. A brief consideration of an institution presenting quite a usual picture will serve to illustrate my meaning. This institution with a bed capacity of eighty-five reports the following cases treated in one year:

Surgical .....	1186
Medical .....	702
Obstetrical .....	83
Children .....	32
Number of operations weekly.....	35

There are fifty-three students in the school. The three years' service is divided as follows:

	1st	Years 2nd	3rd	Total in months
Diet kitchen.....	90	..	..	3
Medical nursing .....	60	60	60	6
Surgical nursing .....	60	60	60	6
Obstetrical .....	..	60	60	4
Children .....	30	30	..	2
Operating room.....	..	..	90	3
Night duty .....	90	90	90	9
Tuberculosis .....	..	..	60	2
Dispensary .....	..	..	..	..
Contagious .....	..	..	..	..
Mental .....	..	..	..	..

Let us for a moment consider the daily average of the clinical material. Estimating the duration of the cases as three weeks, we have the following daily average:

Surgical cases .....	45+
Medical cases .....	41+
Obstetrical cases .....	3+
Children cases .....	2—

The period in the diet kitchen, three months in the first year, illustrates very well our contention of the need of prevocational courses. It is important that the student should have theoretical and practical instruction in the relation of diet to disease. An analysis of this three months in the diet kitchen, however, would show, we feel quite certain, that the experience mainly relates to cookery, time for which should not be taken at the cost of experience in the nursing care of disease.

A night duty may offer a very rich experience or it may be one of very little value. There is no indication in the record I am submitting of the experience the nine months' night duty provided. It is reasonable to suppose

that this period was spent mainly in the surgical and possibly the medical wards. If but half of this period, four and a half months, is spent in the surgical wards, this, with the three months in the operating room, makes thirteen and a half months for surgery alone.

It is needless to call attention to the inadequacy of the children's service, but it is rather important to note that, since there are fifty-three students in the school, not less than twenty-five according to the period allotted to the service—one month the first year and one month the second—must obtain this experience yearly and through a service having a daily average of two cases.

In this schedule it will be noted that there is no period allotted to the dispensary service. One or two months is usually given to this department. An investigation will generally reveal, however, that not only does every student not have this service, but those who do obtain it only assist in the surgical clinics, since there only are their services needed. I am told that 15,000 children passed through a dispensary in New York in one year, but none of the students in the school of this hospital had the benefit of this experience. A most valuable field from the standpoint of a course in pediatrics was thereby lost to the nurses who graduated from this school. Such a field might well have been opened to the students in other schools also.

We could, if time permitted, present an almost endless list of illustrations of a failure even in our best institutions to provide for each student a definite period of experience in these branches of nursing that the sickness problem of the community demands, not because of their inability to procure such experience, but because of their dependence upon the free nursing service provided through the student body.

In addition to the list submitted, I would refer to the inspection forms for nurses' training schools issued by the Louisiana and Maryland State Boards of Nurse Examiners as suggesting data that would be of value in the proposed investigation.

#### INVESTIGATION OF THE CONDITION OF NURSING EDUCATION IN THE UNITED STATES

1. Problem of nursing education.
2. Why is an investigation necessary?
3. Outline of investigation.
  - (a) Work already done.—Miss Nutting's Report on Educational Status of Nursing, U. S. Bureau of Education, 1912.
  - (b) Hospital and schools.
  - (c) Separate schools.
4. Investigation of various fields of work in which nurses are now engaged.
5. Inspection of schools.
  - Hours of study.
  - Hours of teaching.
  - Hours of practical work—night and day.
6. Teaching by graduates; paid or unpaid; qualification of.
  - Teaching by pupils.
  - Lectures by doctors or other people; paid or unpaid.
7. Physical condition of the schools.
  - Dormitory or housing.
  - Conditions, board, laundry, etc.
8. Financial condition of schools.
  - Payment by pupils.
  - Payment to pupils.
  - Cost of maintaining pupils.
  - The capita cost per pupil for maintenance—for teaching.
  - Cost of teaching outside of hospital.
  - Cost of nursing by graduates, etc.

#### PRACTICAL RESULTS OF THE INQUIRY

1. Exact knowledge of the wide variations in curricula and practical work.

2. Definite knowledge of cost of education and saving to hospitals by utilization of pupil nurses.
3. Practical program for changes in present method of education, including:
  - (a) Separation of school from hospital, graduates of schools having choice of hospitals according to merit at graduation.
  - (b) Relief of nurses from maids' work in hospitals, which would improve the character of the hospital nursing.
  - (c) Teaching of pupils by graduates paid for the purpose.
  - (d) Shortening of hours of labor for nurses in hospitals.
  - (e) Raising the standard of nursing, attracting more students of a better class.
  - (f) Diminishing the number of schools by amalgamating many existing ones.
  - (g) Diminishing cost of instruction by such consolidation.
  - (h) Improving physical condition of nurses.

#### Health Centers of the City of Buffalo

March 11, 1916, marked the beginning of an important epoch in the history of the Buffalo Department of Health. On this date the provisions of new ordinances went into effect whereby the ten city physicians then under the direction of the superintendent of poor for the city of Buffalo were automatically released from their positions and four city physicians were employed on full-time at \$1,800 a year, under the direction of the commissioner of health. The city was at the same time divided into four health center districts with a dispensary in each. A health center, according to the Buffalo Department of Health, is a miniature health department located in one section of the city in order to bring its activities into closer relation with the needs of the people. There is a city physician in charge of each health center district with morning (9-10), afternoon (1-3), and evening (7-8) office hours. Sundays and holidays the office hours are 9-10 in the morning.

The program of reorganization of the Buffalo health department includes the maintenance of uniform standard records with a system of interchange between the department of health, the department of poor, and all social service organizations, and a central dispensary, in addition to the health centers. The equipment in all health centers includes, in addition to the city physicians, an attending medical staff, department of health nurses and a registrar for taking history and keeping records. The city physicians are not permitted to carry on private practice. In addition to their office work they make home visits and hospital calls, and supervise the admission, care and discharge of city cases in the city hospitals. The scope of the work includes:

1. A well-baby clinic, where their nutrition and well-being is supervised and mothers are instructed.
2. A sick-baby clinic, where sick children are cared for, malnutrition cases being referred to the Children's Hospital and University of Buffalo service.
3. A nose and throat, eye and ear, and skin clinic.
4. A medical clinic, where all cases are treated except venereal diseases, which are referred to the Urologic Hospital, and tuberculosis cases, which are referred to the Tuberculosis Association Dispensary or the Municipal Hospital for treatment and disposition, according to their character, incipient cases being diverted to the J. N. Adam Memorial Hospital at Perryburg, N. Y.
5. A prenatal clinic, where expectant mothers are guided through pregnancy, to secure healthy children and safe confinement.

6. A free dental clinic, with full-time service staff for school children in two health centers (in addition to the city's free dental service at the University of Buffalo).

The health centers are further utilized as distributing centers for milk and eggs, sputum napkins, etc., for tuberculosis cases, and for supplying the profession with laboratory outfits for the examination of pathological secretions, blood tests, etc., and which include Wassermann, Widal, paratyphoid, tuberculosis, pneumonia, diphtheria and gonorrhea examinations, and, finally, for the distribution of typhoid, diphtheria, and antitetanus serums, etc. Complaints relative to nuisances and offense are received and transmitted to the general office for suitable action.

The system includes a Urologic Hospital, with outdoor service, maintained at the Municipal Hospital, and supervision of midwives and their confinement cases. Both these progressive preventive activities are unique with the Buffalo Department of Health.

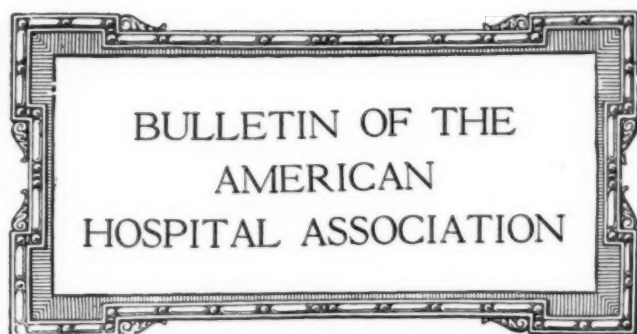
The Urologic Hospital (opened in 1914, prior to the health centers themselves) is maintained at the Municipal Hospital, with forty-six beds and an outdoor service. Medicine (excepting salvarsan, to those who can pay) and services are free to all classes, and the hospital is open to the profession for private cases, subject to approval.

The supervision of midwives and their confinement cases includes lectures, course of instruction (individual when indicated), the actual scrutiny of technic and skill in at least one obstetrical case, and the routine examination of surgical bags and outfits. Every confinement attended by midwife is investigated and the condition of mother and child overseen, with particular reference to the prevention of infective inflammation of the eye and the prevention of blindness. When eye shows inflammation or irritation a bacterial smear is taken and subjected to microscopic examination, and when infection is found to be present, an eye and ear specialist of the department takes charge of the case until recovery, or it is sent to a suitable hospital. Cognizance is taken of other pathological conditions and physical defects, and when present they are attended to in accordance with the indication. This progressive work has been very highly commended by authorities and particularly by the National Association for the Prevention of Blindness, while the actual operations and methods are made the subject of study and observation by medical men, nurses, and social workers for many places.

Experience shows that the health center brings the department of health in close relation with the people and elicits a responsive attitude. It secures the reporting of contagious diseases and lessens their spread. Morbidity and mortality are greatly influenced. Duration of sickness is lessened and restoration to health promoted by securing selective and appropriate hospital and other care for the sick and by following up cases of convalescence after institutional treatment. Prenatal and child welfare work makes for better individuals, and hospital patronage by pregnant women is increased. Traditional prejudice and distrust of hospitals and dispensaries is offset and hospital care of contagious cases increased. The system of uniform records and interchange prevents duplication of work and imposition by the unscrupulous.

The success of these centers is largely due to the invaluable assistance and cooperation of the Charity Organization Society, the District Nursing Association, the Tuberculosis Association, the Infant Welfare Milk Stations, and other organizations, and to the unselfish interest and industry of the public health nurses, whose valuable services should be extended.





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728 Seventeenth Street, N. W., Washington, D. C.  
WILLIAM H. WALSH, M. D., Secretary.

### Committee Appointments of the American Hospital Association for 1917-1918—Brief Comment on the Duties of Each

#### COMMITTEE ON LOCAL ARRANGEMENTS

The members of this committee are to be named. This committee is usually appointed with special reference to the locality chosen for the convention—this year Atlantic City.

The duties of such a committee are many and limited only by the enthusiasm and energy of its members. Heretofore this committee has not only provided the membership with a most cordial reception, but it has provided funds to meet certain expenses incidental to the convention.

This year the association will be obliged to meet extraordinary expenses in connection with the convention, and it is hoped that the committee on arrangements may be able to raise sufficient money to meet the following expenses: four registration clerks (five days); printing of booklet; two stenographers (five days).

The president is ex officio a member of this committee and in his absence the secretary will attend meetings, and aid and assist the committee in every way in his power. In the organization of this committee it has been found advisable to form a number of subcommittees, as follows: (a) transportation; (b) entertainment; (c) hotels; (d) receptions; (e) publication of booklet; (f) publicity.

Transportation.—This subcommittee should make all arrangements for the reception of members at stations and their transportation to various hotels. It is also concerned with any local arrangements that may be made for automobile rides, etc.

#### COMMITTEE ON NON-COMMERCIAL EXHIBIT

The members of this committee are to be named. The non-commercial exhibit is intended to be of value to the members of the association, and if the proper conception of such an exhibit is kept in mind there is no reason why it cannot be attractive. While past exhibits have been more or less commendable, there has been a tendency to display exhibits of very doubtful value. Unless an object possesses some novelty or originality there is little use in showing it, and each commonplace exhibit detracts from the value of the whole, while it utilizes space that might be occupied by something of real worth.

Dolls, for instance, however beautiful or unique, are lacking in interest unless they are used for the purpose of emphasizing some new part of a uniform or nurses' equipment. Hospital executives are not interested in the various colors of uniforms nor in the innumerable shapes of caps; but a new cuff, or short sleeve, a more useful cap, shoe or apron or some other innovation that indicates more

comfort to the nurse, would immediately attract attention and excite interest.

Ordinary clinical charts are of little interest unless some new idea is introduced, either for the more efficient registration of clinical data, for the more facile teaching of the nurses, or for more exact recording of information obtained by the physicians. Exhibits of institutional industrial departments are always welcome, and are of intense interest to all those affiliated with hospitals for the insane, tuberculosis, and chronics.

Home-made instruments or appliances, when embodying new ideas, are a great help and incentive to those institutions that do not realize the extent to which the mechanical force can be utilized when not busy with the usual routine.

#### COMMITTEE ON OUT-PATIENT

Chairman, Mr. Michael M. Davis, Boston; Dr. Robert J. Wilson, New York City; Mr. John E. Ransom, Chicago.

This committee is one that has been actively engaged for a number of years in an intensive study of the many problems connected with dispensary work. In addition to the duties already delegated to this committee, the association has entrusted it with the task of formulating certain standards for dispensary practice, it being the intention of the American Hospital Association to adopt at an early date a definite policy upon certain questions relating to out-patient practice.

The report of this committee may be read before the Out-Patient Section, but a copy must be in the hands of the secretary at least one month prior to the convention.

#### COMMITTEE ON PUBLICATION

Chairman, Dr. William H. Walsh, Washington, D. C.; Dr. H. K. Mohler, Philadelphia; Mr. H. E. Webster, Montreal, Que.

This committee is entrusted with the publication of the annual transactions, and has the power to authorize or forbid the publication of all or any part of such minutes or papers as a part of the proceedings of the association or in any paper or magazine. It is apparent, therefore, that this committee has considerable power as to the disposition of any or all papers read before the association, and in such matters the committee's decisions are final.

The committee consists of three members of the association, one of whom shall be the secretary, who shall be chairman.

#### COMMITTEE ON LEGISLATION

Chairman, Mr. Howell Wright, Cleveland, O.; Oliver H. Bartine, New York City; Dr. George O'Hanlon, New York City.

This committee has been created in response to the wishes of the association, and its function is of importance to every hospital in the country. The members should keep in frequent touch with each other and with all pending legislation that affects hospitals directly or indirectly.

It is the duty of the legislative committee not only to keep informed upon such matters, but also to oppose by every legitimate method the introduction of laws, national or local, that are contrary to the interests of the hospitals represented by our membership, and to aid by every possible means the passage of legislative measures that may favor hospital interests and thereby the public welfare.

This committee will submit a report to the association to be presented at the annual convention, outlining the work that has been accomplished and summarizing the legislation of interest that has come to the attention of the committee.

## COMMITTEE ON MEMBERSHIP

Chairman, Dr. William H. Walsh, Washington, D. C.; Sister M. Genevieve, Youngstown, O.; Miss Minnie Goodnow, Brockport, N. Y.

All applications for membership in the American Hospital Association must receive the approval of this committee before the applicants may become members. It shall be the duty of the committee and each individual member thereof to scrutinize carefully the names of all new applicants with the object of preventing the entrance into the association of anyone who may be ineligible or otherwise undesirable.

This committee shall consist of two members of the association and the secretary, who shall be the chairman, and who may be delegated to perform the duties of the committee; the names of all prospective members, however, must be sent to at least one other member of the committee for approval or disapproval, and if disapproved the names shall be submitted to the full committee.

It is also the duty of each member of this committee to secure by every possible means new members for the association.

A report of the activities of the committee is required for presentation to the association at the annual convention.

## COMMITTEE ON NOMINATIONS

Chairman, Dr. Louis B. Baldwin, Minneapolis, Minn.; John Anisfield, Cleveland, O.; Dr. Louis Burlingham, St. Louis.

This committee is one of the most responsible to which a member may be accredited, and its members are entrusted with grave responsibilities.

The president requests that at the earliest possible date the chairman of this committee communicate with the other members with the object of learning their views upon the qualifications of prospective candidates. It is hoped that definite conclusions will be reached and a report formulated prior to the convention so that the absence of one or more members will in no way embarrass the association.

Candidates to be elected at the forthcoming convention are as follows: (1) president; (2) trustee (one); (3) vice-presidents (three); (4) secretary; (5) treasurer.

## COMMITTEE ON NECROLOGY

Chairman, Dr. Frederic Brush, White Plains, N. Y.; Miss Laura E. Coleman, Buffalo, N. Y.; Miss Ida M. Barrett, Grand Rapids, Mich.

It is desired that a record be kept of all deceased members, and that whenever possible suitable minutes be presented and adopted by the association.

In furtherance of this object a committee on necrology has been named, the duties of which shall be to present, at the time of the convention during a general session, such information regarding deceased members as may have been obtainable.

## COMMITTEE ON AUDITS

Chairman, Dr. W. E. Woodbury, New York City; Mr. Daniel D. Test, Philadelphia; Miss K. M. Prindiville, New London, Conn.; Mr. Cornelius S. Loder, New York City.

The auditing committee will be expected to go over all the accounts of the association at the end of each calendar year and shall submit a report thereof in triplicate, sending one copy to the treasurer, one to the secretary, and the third shall be presented to the association at the next convention. If, in the judgment of a majority of the committee, it is expedient to employ an expert accountant, they shall be authorized to engage one who shall have full authority to consult all the records of the association.

## COMMITTEE ON CONSTITUTION AND RULES

Chairman, Mr. Richard P. Borden, Fall River, Mass.; Dr. D. J. Clark, Toronto, Ont.; Mr. Pliny O. Clark, Wheeling, W. Va.

The business of the association will be expedited in the future if all proposed changes in the constitution and by-laws are submitted to this committee some time prior to the convention. Very often an apparently simple little change will require, if adopted, a whole revision of the constitution and by-laws unless formulated by those who are extremely well acquainted with that instrument. The constitution and by-laws should never be revised hurriedly for the very good reason that every sentence and clause bears a direct relation to some other part and cannot be considered without reference to the whole.

When proposals are made during a convention for changes or modification in our by-laws, they will be invariably referred to this committee before consideration.

## COMMITTEE ON SOCIAL INSURANCE

Chairman, Dr. Thomas Howell, New York City; Dr. Edward N. Brush, Towson, Md.; Mr. G. W. Oleson, Minneapolis, Minn.

The war has in no way decreased the many problems connected with the various phases of social insurance, and it is expected that immediately upon the cessation of hostilities some form of social insurance will be adopted in every state in the Union. Already many have accepted workmen's compensation as necessary, and such legislation is no longer in an experimental stage.

The next inevitable step is health or sickness insurance, and it would seem as though this, too, would soon be enacted into law in some states. Hospitals are very vitally affected by these measures, and it is expected that this committee will carefully study this vast subject in so far as it relates to hospital service.

## COMMITTEE ON PREPAREDNESS

Chairman, Dr. S. S. Goldwater, New York City; Dr. W. H. Smith, Baltimore; Dr. W. E. Musgrave, San Francisco.

The "Liberty War" has multiplied hospital problems many times, and as the conflict continues our institutions will be confronted with conditions which can hardly be anticipated. It is also extremely important that all civil hospitals readjust themselves to changed conditions as rapidly as possible in order that the almost overwhelming odds against them may not seriously interfere with the very necessary work they are performing.

The war has only begun and already many institutions are flying distress signals, so that it is evident that unless very radical changes are made in past practice and customs some hospitals at least will be driven to close their doors. It is to obviate such calamities that this committee has been appointed, and it is the desire of the president that the committee lend every aid in its power by means of bulletins and other publicity to those hospitals seeking or desiring advice during the period of readjustment.

## COMMITTEE ON STANDARDIZATION OF HOSPITALS

Chairman, Dr. Winford H. Smith, Baltimore; Dr. F. A. Washburn, Boston; Dr. W. L. Babcock, Detroit.

The president has considered it expedient to reappoint the former committee *in toto* for the reason that the members are also an advising committee to the committee on hospital standardization of the American College of Surgeons and have already established working relations with that body. The war has necessarily interfered with the activities of the committee, but it is hoped that the com-



mittee will keep in close touch with other organizations working along similar lines, and that it will formulate an independent program for presentation when the occasion arises. If any steps looking toward the standardization of hospitals are to be taken, it is manifest that this association should take a very lively interest therein since our membership is most vitally interested.

#### COMMITTEE ON HOSPITAL ACCOUNTING

Chairman, Dr. A. R. Warner, Cleveland, O.; Dr. O. F. Ball, St. Louis; Mr. Cornelius S. Loder, New York City.

A considerable amount of work has already been accomplished by this committee, but much still remains to be done. It is hoped that eventually plans may be formulated which may be adopted as standards, so flexible as to be adaptable to all hospitals. The committee that is responsible for such an accomplishment will receive the very grateful thanks of the members of this association, and will have rendered a very real service to the hospitals of the country. It is expected that in the proceedings of the new committee careful consideration will be given the work that has already been performed by preceding committees upon the same subject.

#### COMMITTEE ON DEVELOPMENT OF THE ASSOCIATION

Dr. Ralph B. Seem, Johns Hopkins Hospital, Baltimore; Mr. John E. Ransom, Central Free Dispensary, Chicago; Dr. J. W. Fowler, City Hospital, Louisville, Ky.

#### COMMITTEE TO COOPERATE WITH THE MILITARY SERVICE

Chairman, Dr. S. S. Goldwater, Mt. Sinai Hospital, New York City; Mr. Daniel D. Test, Pennsylvania Hospital, Philadelphia; Mr. Richard P. Borden, Union Hospital, Fall River, Mass.; Dr. A. R. Warner, Lakeside Hospital, Cleveland, O.; Dr. William White, St. Elizabeth's Hospital, Washington, D. C.

#### DELEGATES

Delegate to American Medical Association, to be named.  
 Delegate to American College of Surgeons, Dr. A. B. Ancker.  
 Delegate to American Public Health Association, Mr. Michael M. Davis.  
 Representative, Medical Section, Council of National Defense, Dr. S. S. Goldwater.

#### The First Private Yacht Given for an Ambulance Ship

The distinction of being the first private steam yacht presented to the government for use as an ambulance ship belongs to Dr. John A. Harriss' yacht, the *Surf*. Dr. Harriss equipped the boat completely for hospital work and, through the New York County Chapter of the American Red Cross, turned her over to the government for the duration of the war. The *Surf* was built in 1898, has a tonnage of 270, is 166 feet long, with two decks, and is equipped with a wireless outfit. As a hospital ship, the vessel has cabin accommodations for twenty-five patients; its equipment includes operating rooms and convalescent wards. Dr. Harriss, who has been commissioned medical director of the ambulance ship, has undertaken to pay all the expenses of the maintenance of the vessel, and will pay the salaries of the doctors and nurses as well.

A similar patriotic action has been taken by Mr. Albert C. Burrage, of Boston, who has likewise given the services of his private yacht to the government for an ambulance ship, and no doubt other owners of yachts will emulate the generous example of Dr. Harriss and Mr. Burrage.



Conducted by MISS ANNIE W. GOODRICH,  
 Teachers' College, Columbia University, New York City.

Please address items of news and inquiries regarding Department of Nursing to the editor of this department, Teachers' College, Columbia University, New York City.

#### THE EFFECT OF THE WAR ON THE NURSING SITUATION ABROAD

A Report of the Subcommittee on Public Health Nursing  
 SUBMITTED BY ELIZABETH McCracken, Editor, Committee on Nursing, General Medical Board, Council of National Defense.

It must be said at once that this report, at the present time, is of the most fragmentary and tentative character. The reports of the British Ministry of Munitions, relating to matters of health, and reports of the Local Government Board of Great Britain, of a medical character, filed in the Library of Congress and in the Surgeon-General's Library, have been examined. (There are not a great many of these in the library. The statement is made that it is too soon to expect to receive a great number of them; and that many of the few that have been received are in the Bureau of Documents, waiting to be classified.)

In addition to the examination of this material the library of the Children's Bureau has been consulted; annual reports of known local organizations have been examined; recent numbers of medical journals have been read; and there has been a little correspondence with well-informed and reliable persons. The following facts have been gleaned:

There are two fields in which there is a shortage of nurses. One of these is in industry; so far as one can judge, the nursing forces here have not been diminished, but owing to the increased number of workers, the former force is not sufficiently large, and the additional nurses needed cannot be secured, owing to war conditions. In Memorandum No. 10 of the Health of Munition Workers Committee of the British Ministry of Munitions (dated January, 1916), entitled "Sickness and Injury," stress is placed throughout on the importance not only of the nurse, but of a sufficient number of nurses in a munition factory. Not only first aid is regarded as imperative, but also instructive work. The memorandum says:

"The committee has therefore had to consider the prompt treatment of minor injuries, as well as the prevention or treatment of more serious conditions. . . . They are satisfied that not only should advice and instruction be given to the worker as to the proper steps to be taken on the occurrence of accidental injuries, but that suitable arrangements should be made in all munition factories for the effective organization of means of emergency treatment. . . . Any instructions issued should be simple and precise. . . . Wherever possible a trained nurse should be on regular duty. . . . The committee are satisfied of the urgent necessity and value of some such organization as that suggested above. They have been much impressed in visiting munition works with the useful part performed by competent nurses, and the large number of cases of injury or sickness which receive treat-

ment. . . . In 11 moderately sized works, employing about 35,000 workers, 38,000 surgical dressings were performed in the first ten months of 1915. . . . Two other munition works report that in the last half of October, 1915, the nursing staff dealt with 2348 and 2028 cases respectively. . . . While such data point to the need for first-aid work, information obtained from another munition factory suggests that the need today is proportionately greater than in normal times. . . . In the autumn of 1914, when the hours of work were from 8 a. m. to 5:45 p. m., an average of 100 first-aid dressings were done at this factory each month, per thousand employed; in 1915, for the same period of the year, when the hours of work were from 8 a. m. to 8 p. m., the average rose to 292, and at night, when the hours of work were from 8 p. m. to 8 a. m., to 508. . . . The committee are convinced that, both on grounds of health and of securing improved output, this subject demands the immediate attention of employers."

Memorandum No. 8 of the Health of Munition Workers Committee of the British Ministry of Munitions, entitled "Special Industrial Diseases," after a discussion of these diseases, concludes by saying:

"Facilities for the prompt treatment of all cases of sickness and injury are of special importance in factories where poisonous substances are used. The nature and extent of the facilities necessary have already been discussed in the committee's Memorandum on Sickness and Injury."

From Miss Margery Bryce (a niece of Lord Bryce), who, during the winter of 1915-16, helped regularly on three nights a week to prepare and dispense coffee to the women workers in a munition factory near London (the name of it was cut out by the censor), I learned that there was in that factory great need for nursing care during that winter. Miss Bryce, who is 26 years old, said in one letter:

"I had money to pay a nurse, but could not get one to come; they are going to the front, or nursing in convalescent hospitals at home."

This statement was not made as the result of an inquiry; it was simply part of a personal letter, describing the factory, that I received before I had begun this investigation. I have written to Miss Bryce since for more details; but have not yet had a reply.

From Lady Mond, wife of Sir Alfred Mond, member for Swansea, I have received a very satisfactory letter, and also three reports. Lady Mond is the founder of the Swansea Mothers and Babies' Welcome, a school for mothers and creche. This work was begun in 1911, and is the first organized baby welfare work that has ever been done in Wales.

The work of the Babies' Welcome is a combination of instructive visiting nursing, Little Mother work, Mothercraft, and relief, which relief takes the form of free dinners to expectant or nursing mothers. There is a well-baby clinic, a dental clinic for the mothers, and prenatal work. The head of the Welcome is a trained nurse, and there is a visiting nurse who is called "Nursery Matron."

The following figures are of interest: during the year 1914, 20,192 dinners were supplied; 494 mothers came weekly to the "health talks" (Mothercraft section); 234 babies came regularly to the clinic; 700 maternity cases were cared for by the nurse. It is an interesting fact that this nurse, Miss Bragg, who is also a midwife, took, during this year, owing to the scarcity of physicians, 33 obstetrical cases. The reports are full of references to the work of this particular nurse and of her importance in the borough. The next year, 1915, 9,393 dinners were supplied. The decrease from 20,193 in 1914 was due to the fact that the increased separation allowance provided

by the government reduced the number of needy mothers. Six hundred and ninety mothers came regularly to the "health talks." Four hundred and forty-two babies were brought regularly to the well-baby clinic. The number of maternity cases, however, is only 263, as compared with 700 of the previous year. The following quotation from the Annual Report gives the reason for this:

"Thursday afternoon is the only time the superintendent can spare for visiting at the home. . . . Nurse Bragg was called last May for war service, and we have been unable to fill her place."

In 1916 the number of dinners supplied fell to 3433; 434 mothers came to the "health talks"; 273 babies were brought to the clinic. As for the visiting, it still was impossible to obtain another nurse to take Miss Bragg's place; and the report says:

"The number of visits was 253. . . . Nurse Gwynne, one of the town's health visitors, held the health talk, but the visiting suffered."

In a letter from Lady Mond, dated September 16, 1917, she says:

"The Swansea work, like all charitable work needing a nurse, has suffered by reason of the war. The nurses are off for France."

The reports of the Local Government Board and of the Carnegie United Kingdom Trust do not reveal any shortage of nurses, while they do show very definitely that public health work, especially in relation to infants and child-bearing women, has increased since the beginning of the war. It is a fact which must not be forgotten that "health visitors" in England and Wales are not always, or necessarily, trained nurses. The British attitude toward this matter may be seen in the following words from the "Report on the Physical Welfare of Mothers and Children," issued by the Carnegie United Kingdom Trust, Vol. I:

"Many health visitors' posts are at present quite efficiently occupied by persons whose preliminary training has been of a widely different kind, such as that of school teacher, or in business, or kindred occupations, followed by instruction in sanitation, hygiene, domestic science, sanitary knowledge, physiology, etc. Intelligent women so trained, and with a liking for the work, make very good officers, but, on the whole, it is found that the nurse's training has a closer bearing upon the subsequent duties. . . . Other sources of supply may be found among young women who, after a training at one or other of the universities, take up the subject of social science, and become exceedingly useful on a health visitors' staff."

The fact that there has been little difficulty in increasing the number of health visitors (from 600 in March, 1914, to 812 in December, 1915, and up to 1000 in 1916) is explained partly by the circumstance that they are not necessarily trained nurses and by the increased desire on the part of the other types of workers mentioned to do patriotic work.

However, the report does make this remark:

"In considering what the ordinary training and qualification should consist of, it must be borne in mind that the objects of her (the health visitor's) appointment are the lessening and prevention of disease, and the promotion of health—objects which in her particular sphere are identical with those of the medical officer of health in his. The analogy therefore suggests itself that, as in the case of the *medical health visitor—the medical officer of health*—the essential basis of his usefulness rests upon his training in medical science, supplemented by the special study necessary for the degree or diploma in public health, so it will be found that the *nurse's* training is the best groundwork for a health visitor. This implies various things, e. g., a sufficient preliminary or general education; the valuable asset of three years' training in



co-operation with others similarly engaged, a discipline which leads to development of character, and an increased consideration, either natural or acquired, for others; also the administrative experience involved in ward work is always useful."

Dr. Rott, director of the Organization for Infant Preservation in the Kaiserin Auguste Victoria Haus, in a report quoted by Dr. Grace L. Meigs, of the Children's Bureau, in her paper on "Infant Welfare Work in War Time," says:

"It is certainly a deplorable fact that a large number of infant welfare visitors and attendants at the beginning of the war offered themselves for the care of the wounded (although in this department there was an over-supply of nurses), and so withdrew themselves from the extremely necessary infant welfare work."

"Dr. Rott's report was based on a questionnaire sent to 788 infant welfare centers, 266 institutions for the care of mothers and babies, and 271 day nurseries. The replies to the questionnaire disclosed the fact that the centers which have been closed were those which depended on private subscription, and that especially characteristic of private associations was that tendency of the nurses to leave infant welfare work for military duty. Dr. Rott's investigation was confined entirely to Germany."

In France, infant welfare work has greatly increased since the war. The infant welfare work has taken the form of confinement care for mothers, and the providing of milk. Also, considerable provision has been made, and more projected, for the care of children by their own mothers, rather than by foster mothers. This has been largely a financial matter, attended to by means of allowances. The extent, if any, to which the details of this work have been carried out by nurses is not mentioned in the reports.

In Belgium, as in practically all the other warring countries, there has been a marked increase in infant welfare work since the beginning of the war. Dr. W. P. Lucas, in an article entitled "General Health Conditions in Belgium After Two Years of Relief Work," published in the *Journal of the American Medical Association*, in 1917, gives the figures as to this work, and mentions the part taken in it by nurses. He says:

"Previous to the war there were only two material canteens in the whole of Belgium; today there are 329 canteens for infants. These canteens, in connection with the educational work, the medical supervision which all the canteens have, and the careful regulation of the dietary, both in the canteens and by an extensive system of nursing in the homes, have undoubtedly had a marked effect on this great reduction in infant mortality."

Dr. Lucas does not speak of any difficulty in getting visiting nurses. In Belgium, as in Great Britain, the visiting nurses are not in all cases, nor even in the majority, trained nurses; they are volunteer workers. Since the war, there has, in all countries, been a decided increase in the number of women volunteers.

Dr. Lucas quotes Dr. Gengow, secretary of the Anti-Tuberculosis Society of Belgium, as saying that tuberculosis has increased among the poor since the war. There is an increase of tuberculous adenitis among children. As a remedy, Dr. Gengow recommends as follows: an increase in tuberculosis dispensaries, with special visiting nurses.

An American woman who, up to the outbreak of the war, had lived a number of years in Rome, and who is very much interested in the method of caring for the incurably tuberculous in that country, makes the statement that this work has been greatly crippled by reason of the war. The cause is not that nurses cannot be secured, but that there is not money to pay them. She

has shown me letters from a member of a board of directors of this work in Rome, who makes this statement. Placing tuberculous patients in country homes, and having them there visited and supervised, is the method of work. Without the visits and supervision, this brings serious results. Not all the supervisors and visitors are nurses; but the main ones are.

In New Zealand, the maternity and infant welfare nursing has definitely suffered, owing to the shortage of nurses, called to military duty. In 1916, nurses from the Karitane Hospital had to be requisitioned for public health work, owing to the fact that a great many Plunket nurses had left for the front. The Annual Report of the Royal New Zealand Society for the Health of Women and Children makes the following statement:

"As arranged with the government authorities when war broke out, no new residential centers for Plunket nurses have been created during the year."

The arrangement referred to is described in the report for 1915. The reason given is contained in the following quotation:

"In some districts where sufficient funds had been collected to enable the local committees to apply for the government grant of 24 shillings for each pound supplied, the central council asked them to hold the matter over in the meantime, and to work quietly without the Plunket nurse, getting an occasional visit from the nurse as a stimulus to continued effort. This was done at the request of the government, in view of the greatly increased public expenditure which the war was involving."

In Canada, where the public health nursing is done by the Victorian Order of Nurses, the war has had a decided effect. The report of the board of governors of the order for 1915 says:

"The war has affected the order in several ways—our increases are not as great, we have not opened up new districts in cities, many of which were ready to organize when the war broke out."

During that year, 28 of the 292 Victoria nurses left for the front.

In 1912 a fund was established by the Duchess of Connaught for rural nursing in the remote sections of Canada. Since the war it has been difficult to secure nurses to do this work. The report makes the statement that "many districts ready to receive nurses have had to go without them."

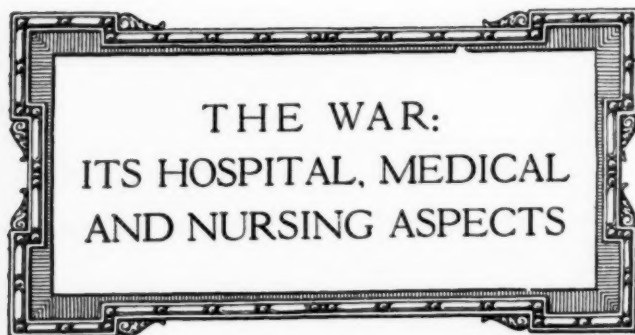
Perhaps, of all the countries at war, Canada is the one most seriously affected by the shortage of nurses. All the reports give evidence of this, even when they do not give actual statistics.

I am constrained to say again, in concluding this report, that it is of necessity partial and fragmentary. The reasons given at its beginning need not be repeated. Since writing its first draft I have, however, added to it. Moreover, after adding to it, I hear of still other reports soon to be available for examination, in which I may find other facts and figures. I therefore submit this report as a first edition, with the promise of a second, and very likely a third and a fourth edition, later. The facts given, few and incomplete as they are, yet clearly lead to two conclusions:

First, that where public health nursing has been done abroad by nurses, it has suffered greatly owing to the departure of nurses to the front.

Second, that the increase in public health work abroad calls for more "health visitors" than ever before; and that in several countries it is recommended strongly that these be nurses—for obvious reasons.

October 18, 1917.



### TRANSPORTATION AND CARE OF THE WOUNDED AT THE FRONT\*

#### Speed of Transportation an Element of Prime Importance —Development of Casualty Clearing Stations Saves Many Lives

"The Development of British Surgery at the Front" is described in a recent number of the *British Medical Journal* by Surgeon-General Sir Anthony Bowlby and Col. Cuthbert Wallace.

At this, the "advanced dressing station," there is a personnel of two or three medical officers, non-commissioned officers, and orderlies, and it is here that the first-aid dressings can be supplemented by additional dressings and by



Fig. 1. Interior of regimental aid post.

suitable splints, so as to insure a more easy transit to the "tent section" of the field ambulance, a mile or two further back.

The field ambulance has not needed to undergo any very radical changes during the war, because its constitution and personnel proved it to be thoroughly well suited to its duties. But its surgical equipment has been very greatly improved and increased, so that it is in all respects well supplied for the performance of any urgent operation undertaken for conditions which do not require that the patients should be retained for any length of time.

It is the supply of motor ambulances alone that has made it possible to deal adequately with the surgery at the front.

One aspect of this subject, however, is very commonly overlooked, namely, the use of motor transport in saving the wounded from capture, for there can be no doubt that, had motor ambulances been supplied in large numbers, the

tale of British prisoners after Mons and Le Cateau would have been very small. The first complete convoy came to the front in the middle of October, and at the first battle of Ypres was of the utmost possible value, both in getting patients quickly to the casualty clearing stations and also in saving wounded from falling into the hands of the enemy during our retirement to the ground we subsequently held.

The motor ambulance, indeed, is the very foundation on which all British surgery at the front is based. Without it the whole system would break down, for no horsed vehicles could possibly deal with the numbers of a heavy fight unless they were so numerous that they would practically block the roads for all other transport, and even then their slowness would result in such delays in delivery that surgery would be of little use. In addition, the well-hung and well-driven motor causes the patient infinitely less distress than the old ambulance wagon, and so delivers him in a much better condition for recovery.

The question of time is a matter of so much importance to surgery that it is well to explain the time that is required to take a patient from the front trenches to the



Fig. 2. Handling a stretcher around a corner of communication trench.

casualty clearing station. It is, in the first place, not sufficiently realized that the chief cause of delay, if it occurs, is "the enemy," for there have often been, and there still are, localities from which the wounded can only be moved under cover of darkness, so that a man may have to be kept in a dug-out the whole of a long summer's day before he can be carried to the rear. Again, in the desert of mud behind the firing line on the Somme stretcher-bearers sometimes took hours to carry a wounded man at night for several miles to the nearest point to which, in the absence of all roads, an ambulance wagon could approach. In yet other cases men lie out in the open ground on the so-called "No Man's Land" for many hours, or even for several days, before they are rescued. But supposing that none of these difficulties exist, the time occupied is very short, for, if communication trenches are good, and if a man is

\*The illustrations used here are shown by courtesy of the *New York Medical Journal*; the originals appeared first in the *British Medical Journal*.



able to walk, he will often get to the advanced sections of the nearest field ambulance within an hour. If the communication trench is long and muddy, it may take twice that time. If he has to be carried, it may take another half hour or more, but as soon as he has got to a good road another hour will see him safely delivered to the place

brought in. No work is heavier than stretcher carrying for long distances and on difficult ground; and as men become exhausted and their pace becomes slower, and they are obliged to rest at more frequent intervals. But even when all difficulties have been surmounted and the patients have arrived at the tent sections of a field ambulance, there are many who are too much exhausted for further immediate moving; and while the staff may have their hands full with dressing the wounded, they have also to care for the needs of the many men who need to be rested, fed, and warmed. While they are thus engaged on these patients, all those who require urgent treatment by operation have been taken direct to the casualty clearing stations, and thus have avoided delay.

The development of the casualty clearing stations has been the most important factor in the creation of a new school of surgery at the front, and it is not too much to say that they have saved many thousands of lives which would have been lost but for the surgical opportunities which they have provided.

Before the war the "C. C. S.'s," as they may be named for brevity, appeared only on paper and as untried units, for they did not exist at the time of the South African war. They were originally called "clearing hospitals," and their proposed function was merely to clear the field ambulances and pass the

patients on to the base hospital. Their equipment, therefore, was only very slight, and their staff of eight officers, including the command officer and the quartermaster, was less than the staff of a field ambulance. They carried 200 stretchers, and were supposed to be able to deal with the same number of patients.

These hospitals, for such we call them, are situated behind the line of trenches along the entire front, and certain local conditions are essential for the success of their work. First, they must be at or near to railway sidings, so that evacuation by train is easy. Secondly, they must be where good roads can connect them with the front. Thirdly, they must have a good water supply.

They are arranged in practically two series: (1) those nearest the front are at a

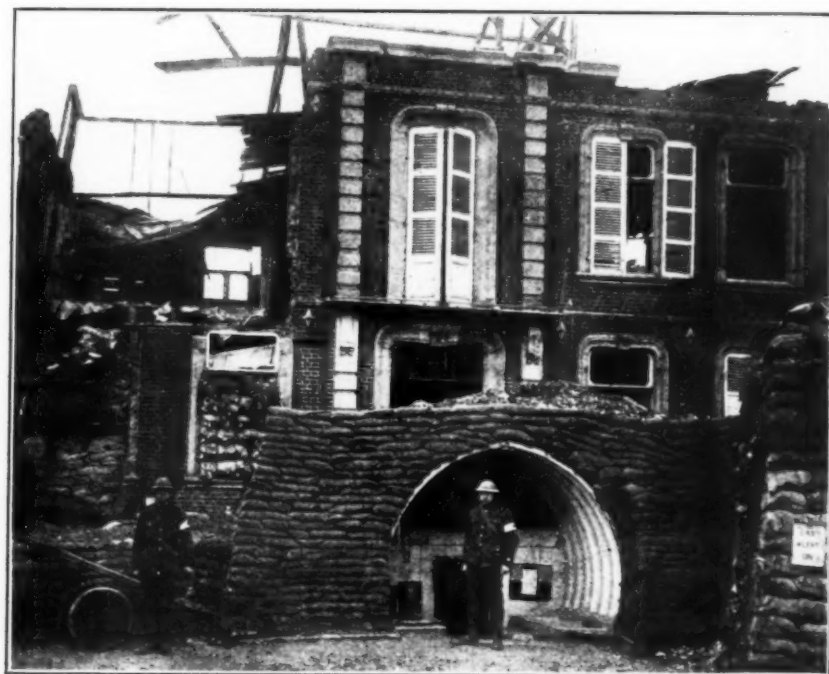


Fig. 3. Advanced dressing station of field ambulance.

where his injuries can be thoroughly treated and where he can be well nursed under excellent conditions.

All this is comparatively simple if no great battle is in progress; and as great battles occur at infrequent intervals, it is evident that in most parts of the line of trenches evacuation is easy and rapid except for unusual local con-

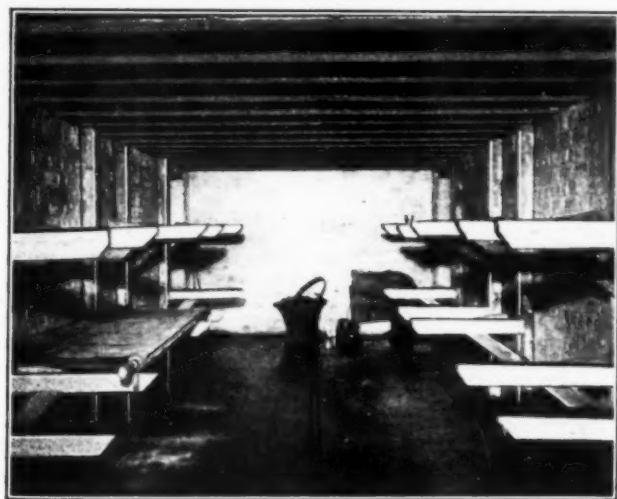


Fig. 4. Interior of advanced dressing station.

ditions. But in very heavy fighting, and especially when troops are advancing, it is often impossible to find sufficient stretcher-bearers in proportion to the great numbers of wounded, for only a limited number are attached to each regiment, and it is therefore necessarily true that the greater the number of the wounded who have to be carried, the longer must it be before the last of them can be



Fig. 5. Shows how compact the wheeled stretcher is when closed.



Fig. 6. A wheeled stretcher shown open.

distance of from six to nine miles from the front trenches; (2) those of the second line are from three to six miles further back, and act as a reserve during active operations, or as units for special cases during quieter times.



Fig. 7. Overhead railway ambulance trolley.

The casualty clearing stations vary greatly in their accommodation, according to the size of the buildings they may occupy, or to the amount of ground available for huts or tents when they are encamped. The smallest accom-



Fig. 8. Two light railway ambulance trolleys.

modate 400 to 500, and the largest from 800 to 1,200. Their staff is reinforced, as may be required, from other casualty clearing stations less actively employed, and from the staffs of the field ambulances.

Wherever possible the casualty clearing stations at the front are linked in pairs, and take in the wounded alternately. In this way it can be arranged that, after admitting as many as can be adequately treated, the wounded are diverted to the other casualty clearing stations, and the staff is left free to treat those they have admitted, without being disturbed by fresh arrivals.

When a casualty clearing station is housed in buildings these theaters must, of course, vary in size with the accommodation afforded. In the huttred or tented hospitals, however, which are the most numerous, the operating theater is a hut about 60 feet by 20 feet, giving space for four tables, and for sterilizing and store rooms. Large theaters are essential in dealing with large numbers.

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#### NOTES ON BRITISH MILITARY MEDICAL ARRANGEMENTS

##### Work in the Restoration and Reeducation of Disabled Soldiers—Treatment of Cases of Heart Disease

BY A RETIRED ARMY SURGEON.

[Continued from November issue.]

##### THE RED CROSS SOCIETY

The work of the Red Cross organization has frequently been referred to in these notes. Its activities are unceasing and the field of its operations extends into every part of the area involved in war, as well as throughout the British Isles. The famous Star and Garter Hotel, at Richmond, having been pulled down, a new building is now in course of erection, to constitute a home hospital for helpless patients. Meantime the annex previously mentioned has been divided into wards, and a lift provided, by which the patients, bed and all, can be carried up to the garden level, and thence wheeled onto the terrace, where they may enjoy the view of the Thames, which itself at this time of the year has an active therapeutic value. The neighboring mansion, Ancaster House, has been bought by the Red Cross Society, and is intended to be a home for officers suffering from incurable injuries. At Brighton five separate buildings, all of them, however, situated close together, have been constituted an auxiliary hospital for officers, provided with an operating theater and all necessary appliances. There are several special features in this establishment, particularly a most complete department for electrical and physical methods of treatment, including such special methods as ionization and whirlpool baths; these latter, of the original French pattern, were presented by the Princess Royal. The open-air treatment is carried out to its full extent, practically all the patients passing the greater part of each day in tents on a lawn facing the sea; the recuperative and invigorating effects of "Doctor Brighton's" treatment are thus enjoyed to the full. One hundred and thirty-three patients are accommodated in the buildings, and in addition a number attend as out-patients.

One branch of the work of the British Red Cross Society consists in the organization and supply of convoy sections; that is, completely equipped and staffed ambulance cars. This useful work has been in operation since the quite early days of the war in the autumn of 1914, many cars having been provided by citizens of the United States and driven by their owners. Much of this work is carried on along roads that are, to some extent, exposed to the ene-



my's fire. Each section is complete in itself, having its own repair lorry and traveling kitchen. Another contribution of the Red Cross Society was the provision of a fleet of dental motor ambulances, to work so far forward as to be within reach of the men in the trenches, thus providing relief for the innumerable cases of "toothache," including all lesions of the teeth and gums, which, though in one sense trivial, as affecting the life of the sufferer, are, from another point of view, the cause of much distress. Under the conditions that obtained during the winter, it can easily be imagined that such assistance would be of immense value. On account of the very large number of men who nowadays are provided with artificial dentures, which under campaigning necessities are liable to get out of order, much inconvenience and suffering is unavoidable, but the provision of relief, right up to the front, within reach of the trenches, has been a very great boon.

After the withdrawal of the British forces from the Dardanelles the considerable hospital provision of the Red Cross Society was transferred from that area to Egypt and Mesopotamia; ten launches equipped for the accommodation and transport of wounded were at work on the Tigris, each carrying sixteen lying-down cases, and from fifty to sixty men able to sit up. A hospital ship to accommodate fifty patients in cots, with full equipment, including an ice-making machine, was also sent to the Tigris. Among the special points connected with the design and construction of this vessel was the requirement that her draught should not exceed 30 inches of water, owing to the peculiarities of the river channel. The Red Cross Society has also equipped and despatched twenty-four ambulances and a traveling x-ray apparatus for use on the Italian front; this latter has been especially valuable, as many as sixty cases of wounded having been radiographed, often actually under fire, in a single day. The British Red Cross ambulance unit was the first to enter Gorizia, crossing the bridge over the Isonzo under fire. Altogether four British units of this society were rendering aid to the Italian army.

The emblem of the Red Cross having been used in irregular and unauthorized fashion on several occasions and in many different places, the society, after consultation with the War Office, issued explicit instructions in regard to this matter: the emblem may be displayed on the ambulance vehicles for transport of sick and wounded and hospital stores; on private houses handed over to the military authorities for the reception of sick and wounded soldiers (provided written authority for this purpose has been received from the War Office); in this case the Union Jack must be flown alongside; and on the uniform of the personnel of the society and of voluntary aid detachments, duly recognized.

#### BRITISH PRISONERS IN SWITZERLAND

In May of last year an agreement was arrived at by which British prisoners in Germany, and German prisoners in Britain, suffering from certain diseases and infirmities, were released from imprisonment and interned in Switzerland. The selection of these cases was carried out by a commission of Swiss medical officers in conjunction with British medical officers in Britain, and with German medical officers in Germany. The chief diseases and infirmities rendering prisoners eligible for this transfer that were agreed upon were: tuberculosis, both of the lungs and of other organs; chronic affections of the respiratory, circulatory, and digestive systems; grave nervous disorders, and chronic poisoning by chlorine or carbonic oxide. The first train from Germany with British prisoners, conveying 32 officers and 272 men, reached Zurich on May 29; on

the following day another train arrived with 150 men. These parties were taken to Chateau d'Oex, in the Vaud canton, a favorite health resort, both in summer and winter, standing at an elevation of 3,180 feet. They met with a friendly welcome all along the route from the Swiss people. In August two other parties, numbering altogether 862 officers and men, arrived in Switzerland, being distributed between Chateau d'Oex, Leysin, and Mürren. Leysin stands at 4,750 feet elevation, in the same canton, some six miles to the east of Geneva, and is sunny and well sheltered. Mürren, at a height of 5,368 feet, is one of the most frequented places in the Bernese Oberland, both in summer and in winter, and commands one of the finest mountain views in the whole of Switzerland. All of these places are in the highest degree adapted for the restoration to health of the sick and wounded, under ideal conditions of climate, and in the midst of a population benevolently neutral at the least.

#### MEDICAL ARRANGEMENTS IN MESOPOTAMIA

The extraordinary difficulties encountered by the Indian expeditionary force under Sir Percy Lake, in its attempt to relieve the garrison of Kut-el-Amara on the Tigris, have been the object of much comment during the last few months. The medical staff was overworked and undermanned; the climatic conditions and difficulties of transport were almost incredibly adverse to the British force, and, as regards the medical services, the greater part of the personnel and material in the country had been shut up in Kut, so causing the relieving force to be but scantily supplied. It is even now impossible to describe, or even ascertain, what actually happened, but one relieving circumstance appears in the otherwise melancholy narrative of events, the civilized behavior of the Turks in regard to the wounded of the British forces. After the attack on Sannaiyat, by mutual consent parties went out under the Red Cross and the Red Crescent, respectively, to collect the wounded, and after the surrender of Kut all the more serious cases of wounds and sickness in the garrison were handed over to the British in exchange for an equivalent number of Turkish prisoners. The hospital arrangements were much criticized on all sides during the earlier months of the expedition, when the management was in the hands of the Indian army authorities; much of this criticism was based on imperfect information and want of acquaintance with the realities of the situation. Since the control was taken over by the War Office, up to the end of 1916, five general hospitals, five stationary hospitals, one casualty clearing station, three Indian field ambulances, and three motor ambulance convoys had been sent out, with a personnel of over 800 medical officers, 500 nurses, and more than 2,000 medical attendants.

#### MISCELLANEOUS NOTES

In an article by Surgeon-General Sir Alfred Keogh on "Surgical Organization in War," two most important principles were laid down and elaborated as to the duties of the army medical service. Its first and most important function is the maintenance of the strength of the army in the field, by taking every precaution for the prevention of disease; the second is the collection, removal, distribution, and care of the sick and wounded. In the circumstances of the present war, the operations of which exceed in magnitude all previous military experience, the regular officers of the army medical service have been required, in very large proportion, for administrative duties; that is, the looking after the practical details of the organization, maintenance, working, and adaptation to requirements of

hospital establishments in the field and on lines of communication, while the more strictly professional duties of medical and surgical care of the sick and wounded have been performed, to a very great extent, by civilian physicians and surgeons, and, what is also of great importance, and an outstanding feature in the present campaign, as compared with former experiences, the scope and standard of practical work and scientific investigation, the fixing of a "surgical policy," has been entrusted to these experts. They supervise the operations and approve the operators, and determine whether the means at the disposal of the surgeons are or are not adequate in every respect. From this it results that the standard aimed at and the results obtained are very much higher and more satisfactory than in any previous campaign. Never before has so wise and liberal a policy of striving for the best results in the medical and surgical care of troops in the field, in camp, and in hospital, been carried out, or even consistently attempted.

A "Casualty Clearing Station" is the technical name for the place where sick and wounded at the front can receive immediate treatment before being despatched to the base; but its resources must be sufficient to deal with cases so serious that they cannot be allowed to travel further; such as, for instance, abdominal wounds that require immediate operation, and fractured thigh; also cases of severe shock. These latter are put to bed, warmed, and given injections of coffee, or brandy, or saline solution. As many as four hundred cases may be admitted at a time. The operating room has to be well lighted, and its walls are enameled white. All cases that pass through are examined, and many have their dressings renewed. Red blankets for the beds are in general use, and impart a cheerful note of color to what might otherwise be a depressing, or at any rate disturbing, environment.

As an example of rapidity in dealing with a large number of wounded, may be quoted what happened on the arrival of a hospital ship at Dublin, carrying 502 patients, of whom 329 were cot cases; i. e., serious injuries needing lying-down accommodation. Unfortunately, rain was falling at the time of disembarkation and distribution of this large number of disabled men; awnings had to be erected, and waterproof sheets provided for all the patients during their removal. The stretcher work was carried out by the British Red Cross and St. John Ambulance organizations. An ambulance train was in readiness at the North Wall landing place, by which 20 cot cases and 130 sitting-up patients were taken off immediately to Belfast. The remaining 309 cot cases and 43 sitting-up patients were divided amongst the various hospitals in Dublin, the largest numbers going to the Dublin Castle Red Cross Hospital (70 patients), and Dr. Steeven's Hospital (50 patients); the rest were distributed among ten other hospitals. At the North Wall landing stage 120 orderlies were employed in this work, and at the various hospitals 149 orderlies. The removal of patients was effected by motor ambulances, some belonging to the Army Service Corps, the Corporation, and the Pembroke Urban District Council, and some lent for the purpose by the Irish Automobile Club. The whole business of disembarkation and removal was accomplished between 9 a. m. and 1 p. m.

"What can't be cured must be endured," is the very worst and most dangerous maxim for a nurse which ever was made. Patience and resignation in her are but other words for carelessness or indifference—contemptible, if in regard to herself; culpable, if in regard to her sick.—Florence Nightingale, "Notes on Nursing."

## DEPARTMENT OF DIETETICS

Conducted by MISS LULU GRAVES.

*Dietitian of Lakeside Hospital, Cleveland, Ohio.*

Please address items of news and inquiries regarding Department of Dietetics to the editor of this department, Lakeside Hospital, Cleveland, O.

### DIETITIANS MEET AT CLEVELAND

#### Two-Day Session Brings Enthusiastic Gathering and Permanent Organization

The first national meeting of the American Dietetic Association was held in Cleveland, Ohio, October 18 to 20. Representatives from twenty-one states and from Canada were present, and an enthusiastic and highly important session was held. As this was the first attempt made at organization the registration was highly gratifying. It gave strong evidence that our dietitians are awake to the problems of the day, and anxious to keep in step with the march of progress.

Major C. F. Hoover, chief of the medical staff of the Lakeside Hospital of Cleveland, gave the opening and welcoming address on Thursday afternoon. This was a very practical talk, giving many important facts concerning food conservation and some interesting facts in regard to war conditions in France, whence he has only recently returned.

Miss Lulu Graves, dietitian of the Lakeside Hospital of Cleveland, as temporary chairman of the conference, explained the reasons for assembling the dietitians, and told how by concerted action we may raise our standards and give to our work a broader outlook for the future.

A round table on food conservation was conducted by Miss Cooper, of Battle Creek, Mich. In the evening Rev. Caroline Bartlett Crane, chairman of the Michigan Section of the Woman's Council of National Defense, told what the Woman's Council of National Defense is doing for this country, and discussed the problem of food conservation also, impressing upon us the necessity of each one of us doing our bit to preserve foods and avoid waste; Mrs. Crane urged that all dietitians place their "expert knowledge and valuable experience" at the service of the woman's clubs, and all who need it.

Following this paper a short business meeting was held. The purpose of the association was discussed more fully and a decision made to form an organization to be known as The American Dietetic Association.

Friday morning Dr. Ruth Wheeler, of the University of Illinois, gave some very interesting results which she had obtained from experimentation on both animals and people at the university.

Miss Sawyer, of the University of Iowa, read an excellent paper on acidosis in which observations were taken on different children to show their susceptibility to acidosis. She showed by charts and figures the effects of anesthesia and starvation upon some children who develop acidosis after operation. An interesting discussion on diabetic



acidosis followed this paper. Dr. Ruth Wheeler told of some good results obtained at the University of Illinois in cases of constipation and indigestion.

Miss Violet Ryley, general organizing dietitian of the Military Hospitals of Canada, told what is being done in Canada for the returned and invalided soldiers, in the recuperative hospitals. The position of the dietitian in these hospitals in a very important one and is recognized as such by the Canadian government.

The paper on "Hotel Management" by Mr. John Willy, of the *Hotel Monthly*, was read by Miss Mary Jones, of Battle Creek, Mich.

Miss Louise Pollock, dietitian of the City Hospital, St. Louis, Mo., read a paper on "The Dietitian and Her Equipment."

On October 20 Dr. Lewis, of the Battle Creek Sanitarium, gave a stereopticon lecture on the value of laboratory reports to the dietitian.

Miss Elva A. George, dietitian, Bureau of Instruction, Washington, D. C., read a paper telling the different phases of work which are open to the Red Cross dietitian.

Miss Lulu Graves, dietitian of the Lakeside Hospital of Cleveland, told of the work which can be done and is being done by "The Dietitian as the Doctor's Assistant." This is a comparatively new field, but a field full of opportunity for the person who is willing to do hard work and much of it.

In the absence of Miss Rena Eckman, her paper on "The Standardization of Dietetics and the Training of the Dietitian" was read by Miss Phyllis Dykeman, of Grant Hospital, Columbus, Ohio. This paper will be published in THE MODERN HOSPITAL.

At a final business meeting a constitution and by-laws were adopted and the following officers were elected for the coming year: president, Miss Lulu Graves, of Lakeside Hospital, Cleveland, Ohio; first vice-president, Miss Lenna Cooper, of Battle Creek Sanitarium; second vice-president, Miss Violet Ryley, dietitian of Military Hospitals of Canada; corresponding secretary, Miss Maude A. Perry, of the Michael Reese Hospital, Chicago; recording secretary, Miss E. M. Geraghty, Grace Hospital, New Haven, Conn.; treasurer, Miss Emma Smedley, director Department of School Luncheons, Philadelphia, Pa.; executive committee, the foregoing, with Dr. Ruth Wheeler, University of Illinois; Miss Edna White, University of Ohio; and Mrs. N. M. Wood, dietitian of the Methodist Hospital, Omaha, Neb.

It was decided to accept the invitation of the American Hospital Association to become a section of their organization next year.

#### Tuberculosis Department of San Francisco Hospital From the Dietitian's Point of View

BY HELEN ABBOTT, Dietitian, San Francisco Hospital, San Francisco.

Having found a satisfactory plan for feeding 260 tuberculosis patients outdoors, I am passing it on in hopes that it may help some one else, especially those interested in city and county work.

We had temporary buildings, lack of system, long distance from the main kitchen, the help situation, and inclemency of the weather to contend with. Little at a time we have improved conditions, putting in a diet kitchen to every two wards. These are not alike because we had to adapt our wants to existing conditions, but we have adopted a pattern that we consider efficient, which is something that kitchens so often are not because architects have never worked in one (Fig. 1).

The greatest discovery which we have made is the

bain marie. In this we heat our hot-water plates, which we fill with clean water once a week for sanitary reasons. As there is no air hole opposite the water funnel, it takes so much time to fill them that we could not think of doing it oftener; moreover, the method of immersing them in the hot-water bath makes them hotter than when they are filled with hot water—so hot, in fact, that they stay hot for two hours. A coup soup plate is used for cover. The cost

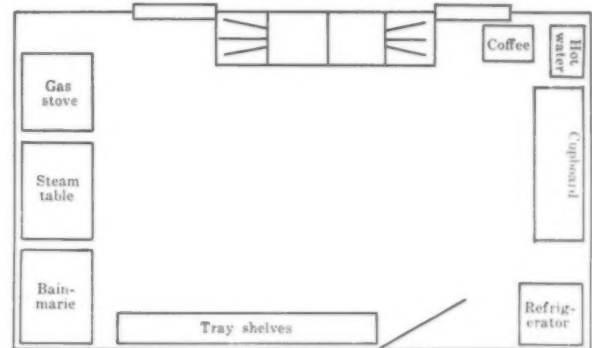


Fig. 1. Ward diet kitchen of the tuberculosis department, San Francisco Hospital.

of this is small, as it is one of the items on our yearly contract. These plates are now manufactured in this country, so that it is possible for any hospital to get them. The American product is lighter than the European and can be more easily repaired, but has the disadvantage of not being quite so water-tight. It is, however, quite satisfactory.

As fast as possible we are putting women into the diet kitchens, so that practically the same system now holds in the tuberculosis department as in the main hospital. The work for the ambulatory patients is now being improved. There is little that can be done in the temporary buildings.

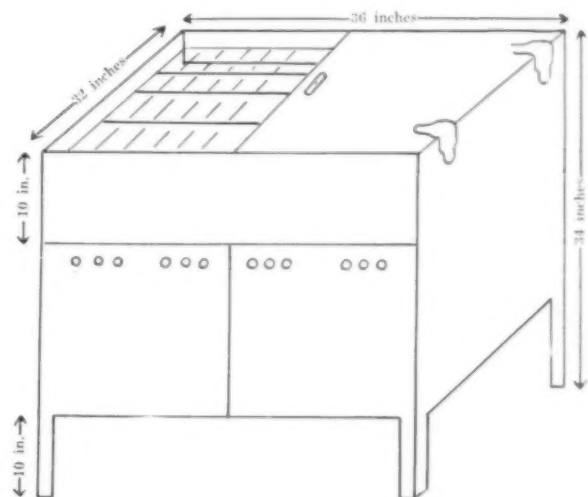


Fig. 2. Bain marie, one cover removed to show plate rack. Each compartment measures 9 $\frac{3}{4}$  by 4 inches. Gas or steam coils may be used to heat the bath. Water is let in and out by turning of valves. Lower part may be used as plate warmer.

Plans are being made for the cafeteria plan of feeding in the new building. This will keep waste to a minimum, as the patient will have some choice. Also, he will be able to wait on himself in part, which is a good idea. This will keep him from thinking that he must be waited on in regard to every little thing and thus becoming lazy in mind as well as in body.

Our second study has been menus. Many menus for tuberculosis patients have been sent us, which we appreciate very much, but none of them seemed to be adapted

to our needs and conditions. Most of our patients come from the working class of people. Many of them have anorexia. After months of study a type menu has been adopted which is varied somewhat from week to week and season to season.

As soon as our diet kitchen situation will permit, more will be done for the larynx and intestinal cases. Comparing the menus one with another, certain similarities will be observed, as: no lima beans; no hash or hashed-up foods, as combination salads; few sweets. If money were less limited, scraped beef sandwiches, steaks, or chops would be given twice daily, and cream soup of some kind

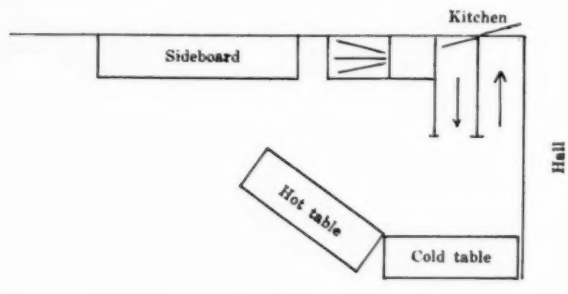


Fig. 3. Arrangement of tables for a cafeteria in the tuberculosis department of the San Francisco Hospital.

daily. This is not possible here. The nature of the disease is such that twice-cooked foods are injurious, while cheese dishes, salads, and gelatin, which are theoretically good for patients, are not practical because the patients never had them at home. Approximately 3,000 calories daily is served on a regular diet. This may be increased by the giving of nourishments, but most of the visiting physicians consider this about right for a day's ration if in the proportion of one part fat, one part protein, and two parts carbohydrate. Nourishments are given bed patients when ordered, at 10 in the morning, 2 in the afternoon, and 8 at night. It has been found better to give the heavier meal at night, in spite of the fact that the majority of the patients are used to dinner at noon before coming to the institution. This is because the patient usually has an elevated temperature in the morning and does not feel like eating. By night the temperature has gone down, the patient feels better and can eat a heavier meal.

#### TYPICAL WEEK'S MENU

Breakfast	SUNDAY Lunch	Dinner
Farina. Eggs. Toast. Coffee, milk.	Stock soup. Cold meat. Cold slaw.	Roast mutton. Dressing. Buttered carrots. Spice cake.
Rolled wheat. Eggs. Toast. Coffee, milk.	MONDAY Rice tomato soup. Lettuce salad. Steak.	German meat roll. Mashed potatoes. Apple sauce.
Rolled oats. Eggs. Toast. Coffee, milk.	TUESDAY Lima bean soup. Macaroni creole. Cheese.	Beef stew, vegetables. Baked potatoes. Corn bread. Stewed prunes.
Cornmeal mush. Eggs. Toast. Coffee, milk.	WEDNESDAY Cream potato soup. Asparagus. Peach tapioca custard.	Boiled beef. Bouillon potatoes. Plain cake. Strawberries.
Farina. Eggs. Toast. Coffee, milk.	THURSDAY Vegetable soup. Rice and milk. Prune square.	Irish stew. Steamed potatoes. Stewed peaches.
Rolled wheat. Eggs. Toast. Coffee, milk.	FRIDAY Clam chowder. Fish salad. Bananas.	Baked fish. Dressing. Mashed potatoes. Stewed figs.
Rolled oats. Eggs. Toast. Coffee, milk.	SATURDAY Spanish rice. Barley soup. Carrot pudding.	Baked beans, pork. Lettuce salad. Stewed apricots.

Nourishments consist of the following: beef tea, cocoa, milk, malted milk, orangeade and lemonade.

NOTE.—Since the foregoing article was written, more money has been appropriated for the tuberculosis department, making it possible to have rather better food, including chicken and ice cream on Sunday. We also have an assistant dietitian, who is over the kitchens. She has already made many improvements, giving special attention to the intestinal cases.

#### J. Ogden Armour on the Truth About the Price of Meat

What makes high prices? Is there anyone today who is not concerned with this question? Many people are busy trying to find the answer. We have numerous government appointees who are making investigations of the situation as controlled by the producer, and an equal number of local authorities in every community investigating in the interests of the consumer, but no one has found a solution, and not a great deal has been done in reducing prices.

It is with more than usual interest, therefore, that we read a communication from one of the largest food purveyors in the world. In *Collier's* for September 15 is an article by J. Ogden Armour, in which he discusses "The Truth about the Price of Meat." He says that the people have a right to know the factors that enter into determination of prices, and that these factors should be explained to them by the purveyors of food. Such prices as are "shown to be justifiable or unavoidable" should meet with the approval of the American people. "For, after all," he says, "business cannot exist without the consent of the people, and ought not to exist without their approval."

In the following statements the present price of meat is shown to be justified by the increased cost of raw material, and by the service which the public requires:

"Meat is such an important item on the American table that its increased cost has attracted attention and command somewhat out of proportion to the rate of advance.

"Meat price increases are not due to big profits, so far as the meat purveyors are concerned. . . . It is actually a fact that the fresh meat from the steer or hog or sheep is sold by the packer to the retailer at a figure which often fails to pay for the raw product—that is, the animal on the hoof. The profits which enable the packer to handle meat at less than cost are due to the utilization of those portions of the animals which until recent years were wasted or destroyed.

"It is necessary that there be a profit in raising meat animals if the supply is to keep pace with the demand. The world demand for food was never greater than it is today. . . . Demand, in short, has run away from supply.

"It is my opinion, however, that before the price of meat, and other food products as well, can be materially reduced, there will have to be a far-reaching change in the demands made by the public upon the retail trade. . . . He [the retailer] is compelled to charge in the neighborhood of 20 percent of the cost price of each article or each pound of meat, in order to cover the cost of doing business. . . . The retailers will welcome a change in the national methods of retailing which will enable them to reduce their cost of doing business."

No one questions the fact that we have too many stores, and that there is no need for so many deliveries daily; but whether this has been brought about by the demands of the housewife or because the retail dealer was attracted by profits to open up a business for himself still remains a question. Did the housewife demand a delivery several times a day or did the retailer offer it as an inducement to get business, until now, in the face of so great competition, it is necessary?

We would think it inconsistent on the part of the con-



sumer to demand a retail shop in every block when so many of them do not patronize the shop nearest them—and we know that is frequently the case.

Mr. Armour sums up the situation and suggests a remedy in the following paragraphs:

"In the first place, there are too many stores. It is obvious that if there were only a third as many as now exist, each one would do about three times the volume of business it is doing now, and a huge amount of overhead and fixed expense would be cut off, making it possible to sell goods on a much smaller margin than is now the case. Those merchants who are doing a legitimate business should be aided, but I believe the public has the same right to limit the number of stores as a means for reducing prices as it has to limit the number of saloons as a means for combating the liquor evil.

"If the people of today would adopt the cash-and-carry system of purchasing instead of clinging to the credit-and-delivery plan, it would be a boon to both dealer and consumer.

"In a word, when the buying public permits the retailer to dispense with frequent and costly deliveries, when consumers pay their bills promptly so that the merchant can meet his obligations before having to pay interest, when the quick-moving advertised and standardized foods crowd the slow-moving stuff off the shelves, and when the number of stores is limited to a point which will permit of a big business being done by each, then, and not till then, will the retailer be able to pass meat and other foods along to the consumer at a price which will not seem high when compared with the wholesale price thereof."

This is a logical conclusion and a plausible way of remedying the conditions to some extent. Undoubtedly the credit system is an expensive one to the merchant, yet there must be some compensations, or it would not be encouraged as it has always been. From our earliest recollection we have heard merchants say that the customer who had the largest account was, in the majority of cases, the hardest one from whom to collect. At the same time, the man who buys on credit will generally receive more consideration in every way than the cash customer. Very often when he pays his bill, or part of it, he gets something that the cash buyer does not get, even though it is only a cigar. The man who has an account gets his name on the book; this assures him many courtesies that the cash customer does not receive. The cash customer may be a good patron for many months and still be unknown by everyone in the house. This is particularly true in the larger retail stores.

We agree with Mr. Armour in regard to the conditions he mentions and the disadvantages resulting from them, but we do not believe that the buying public is the chief offender in bringing about these conditions.

#### Connecticut Association of Dietitians Meets

The Connecticut Association of Dietitians held an annual meeting on November 7 in the dormitory of Grace Hospital, New Haven. The following officers were elected: president, Miss E. M. Geraghty, New Haven; vice-president, Miss Laura Siegel, Sanford; secretary and treasurer, Miss Ethel C. Pipes, Hartford. We are very glad, indeed, to know of this state organization and shall hope to hear of the most interesting things which they will be doing during the coming year.

I will look straight out—  
See things—not try to evade them.  
Fact shall be fact for me,  
And the Truth the Truth forever.

—A. H. Clough.

## CURRENT HOSPITAL LITERATURE

ALBERT ALLEMANN, M. D., Foreign Literature.  
Army Medical Museum and Library, Office of the Surgeon-General,  
United States Army.

**Experiences with the Quartz Light Treatment.** P. Sokolow, M. D. *Corr.-Bl. f. Schweiz. Aerzte*, 1917, XLVII, No. 21.

The use of quartz light has of late been greatly extended, especially in the war hospitals. The author has employed this treatment in the Polyclinic of the University of Zurich in a great number of cases, not only for skin diseases, but also for internal and nervous diseases. The results in cases of skin affections were very good. The method is of great value in neurasthenia, enabling the patients to sleep. A case of bronchial asthma, two cases of dry plurisy, and four cases of surgical tuberculosis were completely cured.

**The Canton Medical Missionary Union.** *China Med. Jour.*, 1917, XXXI, No. 3.

Almost all the Protestant missions of the province of Canton are represented in the Medical Missionary Union, which owns and manages one of the largest hospitals in Canton. The Chinese take a great interest in this institution. The first and the present presidents of China, two cabinet ministers, and other prominent state officials have generously subscribed to the funds of this great hospital. The present president of China sent \$5,000, stating that this was the only hospital to which he would make a donation, because it was the first hospital on Western lines to be established in China. The hospital has lately celebrated its eightieth anniversary, at which the governor, the foreign consuls, and a large representative body of Chinese and foreigners were present.

**Arrangement and Management of a Large Barrack Hospital During the War.** M. Steffelaar. *Ziekenhuis, Amsterdam*, 1917, VIII, No. 8.

The author gives a lengthy description of the large Austrian reserve hospital at Olmütz in Moravia, where the Dutch Red Cross worked during the winter of 1916-17. This hospital contains 2,000 beds and was originally established by the Province of Moravia, but in June, 1916, was taken over by the medical department of the Austrian army. It is favorably located on an elevated plane at some distance from the city and connected with the railroad by a branch line. In front are the administrative buildings. The center is taken up by twenty long one-story barracks arranged in three rows. On one side are the kitchens and other incidental buildings, and on the other the railroad station. The large interspaces are taken up by flower and vegetable gardens. Cement walks connect the various buildings. The greater part of the barracks are built in wood, but as the price of lumber rose it was necessary to build the other barracks in brick. As the climate of the region is very hot in summer and very cold in winter, a cement wall was built within the

wooden walls with an interspace of 15 cm. between the inner and outer wall. The floors are of cement and are washed every six weeks with an oily fluid to make the cement more compact. The roofs are of boards covered with asphalt. Several barracks are taken up by Russian and one by Turkish wounded. A medico-mechanical institute is connected with the hospital. It contains the most varied apparatus for the treatment and reeducation of the maimed soldiers.

**Coordination of Tuberculosis Activities in Ohio.** J. R. McDowell, M. D. *Ohio Pub. Health Jour.*, 1917, VIII, No. 5.

Though the antituberculosis movement in Ohio was started only about ten or fifteen years ago, a great amount of work has been accomplished, and the state ranks well toward the top in comparison with the other states of the Union. The present equipment consists of 463 visiting nurses in 68 stations, 27 free dispensaries in 19 cities, open-air schools in 4 cities. There are 2 municipal hospitals with a total of 770 beds, 3 county hospitals with 286 beds, 4 district hospitals, supplying 16 counties, with 237 beds, a state sanatorium with 166 beds, and several smaller institutions. The total number of beds is 1,527. But the number of cases of tuberculosis amounts annually to 30,000. Though only about one-third of this number may need hospital treatment, the present hospital provisions fall still far short of the actual needs.

**Urgent Need of Establishing Heliotherapeutic Institutes and Stations for the Ambulatory Treatment of Osseous, Glandular, and Incipient Pulmonary Tuberculosis.** Signora Cozzolino. *Tubercolosi*, Milano, 1917, IX, No. 12.

The Antituberculosis Society of Genoa has established a heliotherapeutic institute for the treatment of surgical tuberculosis in children. The patients remain from morning till night at the institution, where they are exposed to the sunlight under competent medical supervision. The children are given a meal at noon and in the evening they go to their homes. The results have been very good. As such heliotherapeutic station requires no large outlay of money, the author proposes to establish similar institutions in all the cities of Italy. But he adds that heliotherapy requires much special knowledge and experience in order to be successful. It is therefore necessary to place these institutions under special nurses who are thoroughly trained in this method of treatment.

**The Carrel Hospital at Compiègne and the Treatment of War Wounds.** L. Cherubini. *Riv. osp.*, Rome, 1917, VII, No. 8.

The author visited the famous Carrel Hospital located at Compiègne, 50 miles northeast of Paris. He was impressed with the energy and enthusiasm of the French medical officers. He ascribes a large part of the great success of the hospital to the diligence and careful work of the nurses who are almost all volunteers. When the wounded arrive at the hospital they are most carefully examined by x-rays and other methods. The wounds are opened up well and carefully cleaned and all fragments of projectiles and cloth fibers removed. Sterile rubber tubes are then inserted, with end closed, but provided with numerous lateral openings. Every two hours 20 or 30 c.c. of Dakin's solution is injected through this tube. With the exception of a small strip of gauze no bandages are applied. Recovery under this treatment is remarkably rapid. Patients who seemed to require many months of treatment are completely cured in from fifteen to thirty days. The author concludes by stating that from what he

has seen this is the only true and rational treatment of war wounds.

**Plan of a Pavilion for Infectious Diseases for a Town of about 30,000 Inhabitants.** H. J. Fesevur. *Ziekenhuis*, Amsterdam, 1917, VIII, No. 7.

The number of cases of infectious diseases has enormously increased since the war started, the author states. All the hospitals in Holland had to make special arrangements to meet this new demand. The author gives a sketch of a pavilion for infectious diseases which was erected for the Dordrecht Hospital. It is a long one-story building with six rooms of four beds each. At each end is a room containing six beds. In front runs a full-length veranda. Along the back runs a corridor communicating with all the rooms. Behind this is a second narrow corridor whose communicating doors are closed and which is used only by the physician and the chief nurse on their visits. In this corridor there is an arrangement for disinfection and change of upper garments.

**Reconstructing the Cripple; a Pioneer Institution in Copenhagen, Denmark.** Margaret Monrad. *Am. Jour. Care Cripples*, N. Y., 1917, IV, No. 2.

In 1872 Rev. Hans Knudsen founded a society for the care of crippled children. Its aims were twofold: to establish a clinic to alleviate or cure the various ailments and to found a school which, working in touch with the clinic, would give the patients training in a suitable occupation or trade. For the first few years the society rented private buildings for its purposes, but the membership grew so rapidly and so many donations were made by private parties that the society was soon enabled to erect its own buildings, which are located on one of Copenhagen's most beautiful parks. The institution has now a permanent staff of physicians and nurses, its own hospital, and a sanatorium at the seashore. During the year 1914-15, 6,173 patients were treated; of these, 773 were treated free of charge. The institution has its own school where the children within the school age are educated. After they leave the school they enter one of the shops, where they learn a suitable trade.

**The Psychiatric Services of the War.** A. Alberti. *Riv. osp.*, Rome, 1917, VII, No. 9.

Three months after Italy entered the war it was necessary to establish special psychiatric services in the medical department of the army. As it was not advisable to treat the mentally deranged men in the same hospital with the other soldiers, special pavilions were constructed on the same plan and arrangement as the observation pavilions in modern hospitals for the insane. The buildings are only of one floor and are divided in rooms to contain not more than ten patients. These hospitals were established behind the front. Gradually, as necessity required, other pavilions were added, so that the buildings finally represented quite extensive observation hospitals for demented soldiers. The men whose condition requires treatment in institutions in the interior of the country are transported on special cars to Milan, Rome, and other cities.

**Suggested Improvement for Out-Patient Work With Children.** Stafford McLean, M. D. *Arch. Pediat.*, 1917, XXXIV, No. 3.

In spite of radical improvements in a few dispensaries, the chief characteristic of present out-patient work, Dr. McLean says, is slapdash haste, incomplete diagnosis or none at all, snap diagnosis, and poor laboratory work or none. The pride of the dispensary head is not in the



quality of the work done, but the number of cases seen daily. The patient "is too poor to pay for the services of a physician; in the eyes of the clinic worker too ignorant to understand directions relating to his medical condition; not sick enough to be admitted to the wards of the hospital, but wise enough to know that he will get as much relief from a bottle of patent medicine or the gratuitous advice of a lay friend as he will by returning in a week's time to the dispensary for more of the slapdash treatment."

It is not the number of patients seen, but the excellence of the treatment given, that should be the boast of the chief of the clinic. The time spent on the "one-visit" patient is wasted. Follow-up work should be done if the patient does not return for treatment on the day appointed. The average clinic worker will argue that dispensaries that are already overcrowded will become intolerably congested if follow-up work is done. Dr. McLean's reply is: "If the only method of preventing overcrowding is to give poor service to those who seek medical relief, then the dispensary should be abolished. . . . I am certain, at least as far as children's dispensaries are concerned, that unless they are very good they should be entirely abolished." He suggests two alternative remedies: that the number of clinics be increased with more intelligent reference to the density of population, or that longer clinic hours be kept, with a shift of physicians.

Dr. McLean divides dispensaries into three classes: those run in connection with hospitals, those affiliated with medical schools, and those without medical affiliations. Those managed in connection with hospitals are mainly used as feeders for hospital beds and to some extent for the after-care of discharged patients. In spite of the vastly greater cost of hospital as compared with dispensary care, no definite preventive work is done in the dispensary. Development of dispensaries, in connection with a social service department, to the point of maximum efficiency, would be a great economic saving, for it would reduce the need for hospital beds.

Dr. McLean's suggestions for improvement in out-patient work apply especially to work with children. If possible, the dispensary should be connected with a hospital. A laboratory with well-trained bacteriologist and serologist is essential; so are certain comforts for patients. An x-ray department is almost a necessity. The records should be kept, filed, and cross-indexed as in the well-conducted general hospital. The staff should consist of an admitting physician and the chief of clinic and his assistants, among whom should be numbered a laryngologist and otologist. The admitting physician Dr. McLean regards as an extremely important official. "Allowing sick children to sit side by side in the waiting room of an out-patient service is neither sane nor necessary"; for a patient may thus contract a disease worse than the one with which he came. "There is no good preaching preventive medicine if even the prospective patients are subjected to these abuses." No man should be accepted on the staff who will not promise to remain at least a year. The director of the clinic should have a position in the hospital wards.

Serious thought should be given to the problem of congestion. More physicians and longer admitting hours would make it possible to care for more patients. A better social service department would render it unnecessary to see patients so frequently. Pay dispensaries for those who are able to pay but unable to meet the charges of specialists would reduce the amount of illness and hence of dispensary congestion.

## QUERIES AND ANSWERS

### Demand for Hospital-Trained Nursery Maids

To the Editor of THE MODERN HOSPITAL:

Are any of the hospitals that you know of giving training to nursery maids, and if so, what; and are the trained maids in demand in the community, and at what wages?

A WESTERN SUPERINTENDENT.

A number of hospitals are training nursery maids and are enthusiastic about the work. Michael Reese Hospital, Chicago, has maintained such a school for the past eight years, and Miss Margaret McKenzie, superintendent of the training school is unable to meet the demand. At Michael Reese the course is one year, six months in the maternity department, and six months in the children's hospital. The school is able to care for twenty pupils. The requirements are good moral character, pleasing personality, and a grammar school education. Pupils are given a certificate on completion of the course, and the school is unable to meet the demands for nurse-maids at \$10 to \$15 per week. There is a regular course of study, simple but thorough, practical rather than theoretical, lectures and demonstrations by the graduate head nurses in the two departments, and supplementary lectures by the medical staff members of the two services.

### The Best Window Shades

To the Editor of THE MODERN HOSPITAL:

I have looked through the literature, especially through back numbers of THE MODERN HOSPITAL, to find a substitute for the old-style roller blind, but without success. Can you tell me just what is the approved form of window shade at the present time?

Then, again, where the windows are double-hung and there is a transom opening inward, it is impossible to fit a blind that will cover window and transom.

AN ARCHITECT.

Nothing has been found as a satisfactory substitute for the so-called Holland window shade, which differs from the older form of semi-opaque shade only in that it can be washed or cleaned and is not quite so opaque as the older and stiffer cloths.

The great trouble is that hospitals do not clean their window shades, no matter what they use, and what we call curtains have almost no purpose except ornament. They do not shut out the light unless they are of heavy goods, and in any case they are dirt-catchers, rendered more offensive during the past decade, or since we have been accustomed to putting our radiators under our windows. The placing of the radiator there has the effect of bombarding the area above the radiator with dirt particles as a result of the heat rising from the radiator and taking with it these dust particles.

On the whole, we are quite sure that the so-called Holland shade is the best solution of the problem up to this time, and you will find it quite satisfactory if you will have your shades taken down about once a month, laid

across a table and washed off, while still stretched, with a soft sponge, tepid water, and a very little green soap, then rinsed with cold water without soap. The shade can then be laid straight on a clean floor, or upon a sheet laid on the floor, until it is thoroughly dry. This is not so complicated a piece of technic as might be imagined, because the shade dries very quickly and a considerable number can be laid, one on top of another.

To solve the transom problem, it is best to hang the transom shade separately; fasten the roller at the bottom of the transom and work the cord through a pulley that has a catch mechanism in it, from the top.

#### Official Uniform for Nurses

To the Editor of THE MODERN HOSPITAL:

I have read somewhere that a nurses' uniform made by a certain manufacturer has been adopted as the official uniform for nurses in the government service. If this is correct, will you kindly give me the name and address of this manufacturer; or, if not correct, please recommend some firm making good uniforms for nurses.

SUPT. OF NURSES IN A WESTERN HOSPITAL.

It is not true that the government has designated any particular manufacturer as an official maker of nurses' uniforms, and it is not likely that any such step will be taken. All of the firms advertising nurses' uniforms in THE MODERN HOSPITAL are reliable, and we suggest that you write some or all of them regarding your requirements.

#### Standard Normal Salt Solution

To the Editor of THE MODERN HOSPITAL:

Will you kindly tell us how the so-called "normal salt solution" that the surgeons use is made, and how it is kept ready for use?

A SUPERINTENDENT.

The pharmacist makes up the concentrated Locke or Ringer solution, both of which are standard. These solutions are then sent to the operating department, where they are diluted with distilled water, according to the directions which your pharmacist will give you. The solutions are put into 1-liter or 2-liter Florence flasks capped with a pledget of cotton tied over with sterile gauze; the flasks are then placed in the sterilizer and given the three-day fractional sterilization. In Michael Reese Hospital, Chicago, the solutions are kept at 120 F. in a continuous bath in an automatically controlled solution sterilizer heated by gas, and are always ready for instant use. Sometimes the surgeons require the use of these solutions in the homes of patients, as, for instance, in a case of eclampsia. One or two flasks are taken out of the bath, wrapped in a heated blanket, and the hospital sends an intern and a surgical nurse with the "normal salt solution box" in an ambulance or automobile to the scene of the emergency. Care is taken to train all surgical interns and nurses in the use of the apparatus, whether the intravenous, subcutaneous, or abdominal method is desired. This is one of the services to the community which this particular hospital prides itself on giving, and for which there is no charge.

Miss Catherine Kent, of Jackson, was chosen president of the Mississippi Association of Graduate Nurses at a meeting of the association held in Vicksburg early in November. Other officers for the ensuing year are: first vice-president, Miss Mary Trigg, of Greenville; secretary, Mrs. Jennie Quinn Cameron, of Hattiesburg; treasurer, Miss Jane P. Cox, of Natchez.

## LETTERS TO THE EDITOR

### More Knowledge Instead of More Sanatoriums

To the Editor of THE MODERN HOSPITAL:

It is a wretched state of affairs that I have to report. I find that my greatest interest and all my enthusiasm centers upon efforts to avoid the necessity for hospitals for tuberculosis patients. I am not at all in sympathy with the present scheme of antituberculosis work. It seems to me to begin at the wrong end. I can only see my point of view and so cannot have much patience with what I consider unwise. To let a case of tuberculosis go on until it needs hospital treatment is where we fall down in our methods. What we should do is to keep after the children by periodical examinations and see to it that tuberculosis never develops. "Fewer hospitals every year, no more sanatoriums!" would be my war-cry instead of more.

Every year should see a tuberculosis hospital closed instead of opened. Instead of every week reporting new societies and new buildings and new appropriations, I should like to read: "Thanks to the careful survey and care of our children, we find that the need for beds for tuberculosis patients is steadily decreasing."

I feel that we are on the wrong track; that we are picking up and palliating but not preventing; that we are ignorant, have no idea of what this disease is that we are combating with so much complacency and self-congratulation; and that before we can know anything really about it we must first get down and study and find out what are facts and what are fancies. There is any amount of dogma and doctrine that needs discarding and any amount of laboratory work that must be done before we know anything adequate to the problem. To attempt the solution of the tuberculosis problem in the present complete state of our ignorance is like the metaphysical work of the dark ages. We are all metaphysicians in this work today, and we need science first of all to take us out of this mess we are in and show us the way. We do not even know what place the tubercle bacillus occupies in the world of acid-fast bacilli, nor do we know its life history. We only know one stage of its existence. We are thoroughly uninformed as to the source of the extremely wide-spread infection of children—so wide-spread that even Theobald Smith speaks of it as "ubiquitous." Why is this infection ubiquitous? Where is it? At what age is it acquired? Instead of going smugly on as we are doing, patting ourselves all over the back and thinking we are really attacking the tuberculosis problem, we should come out in the open and say frankly that we are going too much on surmise.

Will not some man give us the money to study tuberculosis as it should be studied? Why does not the Chicago University make a research work? What we need to do is to study. We need more knowledge and fewer hospitals—more study and less nursing. Let us replace milk and eggs by scientific facts and do away with the necessity of caring for the results of our ignorance. Tuberculous processes should never be permitted to develop into manifest cases. We need a thorough overhauling and reconstruction of our tuberculosis theories if we are ever to get our heads above this sea of fatuous self-satisfaction in which we are submerged. If you could just get someone in the research department of the university to study these problems, and show us how to reduce the number of cases! This has never been done. It would be a great thing for Chicago to show the way to the whole world for all times. The real preventive of tuberculosis consists in the acqui-



sition of more knowledge—not in palliation—which is what we are doing today.

MARY E. LAPHAM, M. D.,  
Highlands Camp Sanatorium, Highlands, N. C.

### A Hospital Service Flag

To the Editor of THE MODERN HOSPITAL:

I thought you might be interested in the inclosed photograph. Our service flag, which I believe is the first one on any New York hospital, contains one hundred and ninety stars, these representing those who have left the



The service flag of the Presbyterian Hospital in the City of New York.

hospital service for military duty. The photograph is not a very good one, but is the best we can do from any available point in our vicinity.

CHARLES H. YOUNG,  
Superintendent Presbyterian Hospital in the City of New York.

### Move to Promote the Training of Nose and Throat Specialists

To the Editor of THE MODERN HOSPITAL:

As you are aware, a committee representing all the associations of otolaryngologists upon this continent has been at work for some years in the endeavor to standardize the training of those who desire to enter upon this specialty.

In contradistinction to the ophthalmologists, the committee is not proposing an examination for license by a federal board, but favors the obtaining of a special degree, D. Sc. (otolaryngology), from the post-graduate department of leading universities, upon examination after the completion of a definite course of training; (1) as an intern of a standard hospital in medicine or surgery, or both, or a term of years in practice; and (2) as intern in the otolaryngological department of a standard hospital, for eighteen months; and (3) the attend-

ance on a short course in such subjects as special anatomy, embryology and histology, physiology, pathology and bacteriology, neurology, and physics, in the post-graduate department of the university conferring the degree.

In order to be in a position to lay the scheme before the post-graduate boards of study of the universities for their consideration, the committee must be informed what facilities are afforded by the hospitals of the continent for the reception of special interns.

1. The total number of beds in each hospital.
2. The number of these set apart for otolaryngological cases.
3. Whether these are under a departmental head.
4. Whether there is an intern set apart for this department.
5. The regulations regarding the intern service. Is there (a) a rotation service, or (b) a lengthy period confined to one department, or (c) a graduated term of service, juniors, seniors, etc.

It hardly needs to be pointed out that should such a scheme as outlined above be brought into operation and be supported by the leading special and general hospitals, such hospitals would be insured a constant succession of satisfactory material out of which to man the department of otolaryngology with responsible and earnest interns.

Condition 1 laid down above would make it reasonably certain that the interns in question would be possessed of a sound basic training and with these, entrance upon the special training of otolaryngology would be in no sense an experiment, but a deliberate investment of time, determined upon after mature thought.

Moreover, where a rotation system of internship is in operation, the scheme outlined above would not interfere. The rotating intern would still take on the otolaryngological service for six weeks or two months, acting in the capacity of junior on the service, and receiving much help from the chief intern.

Information as to the number of hospitals which have a regular department of otolaryngology is difficult to obtain. Any general hospital of 250 beds should have at least 15 beds set apart for such cases, and these would occupy the full time of a houseman, provided he worked also in the out-patient service.

Any information which your readers can supply will greatly assist and will be appreciated.

On behalf of the committee,

D. J. GIBB WISHART, Chairman,  
47 Grosvenor street, Toronto, Can.

### Economical Features of a California Sanatorium

To the Editor of THE MODERN HOSPITAL:

We are mailing you under separate cover a copy of our last annual report, which will give you a fair idea of our work, and also offers a number of details as to the methods of administration, etc.

It is interesting to note that the cost per patient per week has been kept at such a low figure in spite of the facts that most of our patients occupy individual rooms in separate cottages, and that the cost includes all medical supplies, drugs, personal laundry, and everything else pertaining to the care, living, and treatment. This cost includes also the value of vegetables raised in the garden by patients, which are charged to the provision account at market rates. There are several factors that may have helped to bring this about. Owing to the climate, it is not necessary to heat the patients' cottages at all, and the

heating of the main buildings is not required except for a small portion of the year. Consequently, our fuel bill alone is very much less than that of a corresponding institution in the East or in other colder localities, such as Minnesota, for example. Using oil for fuel saves a great deal of labor, handling coal, taking out ashes, etc. Situated within the city limits, we enjoy the advantages of city water, sewerage system, electric light and power, gas and transportation facilities not possible in the case of institutions situated in more remote places. A considerable item is saved in the way of wages by having the patients wait upon themselves at the table, so that only one pantry girl is required during the meals to see that the various serving dishes are kept replenished.

We do pay considerable attention to the question of occupation for patients, especially as a means of training and trying them out before they resume a life of activity after discharge. A vegetable garden and outdoor workshops furnish ample facilities in this direction. Patients are also required to make their beds and take care of their cottages in all cases in which the physical condition indicates. While the economic side of the patients' occupation has never been emphasized very much, at the same time it does help to keep down expenses somewhat in certain directions.

WALTER C. KLOTZ, M. D.,

Resident Physician, Barlow Sanatorium Association, Los Angeles, Cal.

#### The Family as the Unit of Public Health Work—A Correction

To the Editor of THE MODERN HOSPITAL:

I much regret an error which appears in my paper, "The Family as the Unit of Public Health Work," published in the October number of THE MODERN HOSPITAL, page 247. A sentence occurring in the fourth paragraph, on page 249, reads as printed, "All the home visiting is done not only by a separate staff of public nurses, but by the public health nurses already visiting in that particular locality." The word "only" is a typographical error, conveying an entirely different meaning and thereby destroying an important point which I wish to make.

MARY BEARD,

Director of the Instructive District Association of Boston.

#### Sterilization of Food Debris in Isolation Hospital

To the Editor of THE MODERN HOSPITAL:

In connection with a very up-to-date isolation hospital now under construction, estimates were asked of a number of firms specializing in sterilizing apparatus for a specially constructed sterilizer, which was to be used in a somewhat new way, to insure the sterilization not only of the dishes, but of the food debris, before the debris was thrown into the sewer, in this manner insuring against any possible spread of contagion through this source. A very well-known sterilizer manufacturing concern wrote to me, as a suggestion: "If you turn live steam on dirty dishes you will cook the debris so that you will be unable to wash it off. We think it would be a great deal better to wash the dishes first and sterilize them afterwards."

I write this merely to show how dangerous it is to depend, as is sometimes done, on the experience and scientific knowledge of the manufacturer. In the hospital in question, which is intended really to isolate contagion, the dishes from the patients will be brought to a room for the purpose, and put into a sterilizer of special construction—tray, napkins and debris—just as it leaves

the patient. After sterilizing, the sterilizer is opened from another room—a clean room—on the opposite side of the partition in which this sterilizer is located, and the trays of dishes are removed, scraped and washed. Contagion from the refuse and handling of it and the dishes is thus reduced to practically zero.

V. A. MATTESON, Architect,  
La Salle, Ill.

#### Plea for the No-Staff Hospital

To DR. JOHN A. HORNSBY AND ASSOCIATES in the Standardization of Hospitals Series of Articles:

I have your letter of the 1st instant. I have read the article on "Hospital Standardization" in the August number of THE MODERN HOSPITAL. This interested me very much. You ask whether I think there is any reason to make any change in the markings of such hospitals as ours when compared with the teaching hospitals. I believe so. At the same time I am very free to say that this is a question that I have not hitherto seriously considered, and what I have to say, therefore, is largely said with a view of presenting new angles for discussion.

To begin with: I do not agree with the statement made in the heading of your July article, in which you characterize the teaching hospitals as "the most important of all institutions"—I suppose meaning institutions of the hospital type. This conclusion in my belief is entirely foreign to the consideration of the subject as I see it. I take it the desire is to segregate the various types, reaching some general plan of estimating the degree of perfection reached by hospitals in each type. That I think does not call for a comparison of the relative advantages of the various types either to the community at large, the patient, or the physician. As, however, you have made the statement, I want to ask your indulgence to say a few words on the subject.

It is admitted that the primary object of a hospital is the care of the patient. My understanding is that the primary object of the teaching hospital is to provide material for the practical teaching of the student body. That being so, I believe it is difficult to get any other atmosphere in a teaching hospital, and the care of the patient quite naturally, though unintentionally perhaps, is relegated to a condition of secondary importance. I may be wrong, but that is the impression that has been left in my mind.

In the next place, teaching hospitals are largely devoted, as I understand it, to the very commendable object of caring for the indigent and the semi-indigent, using that material for the practical teaching of the student. This is, no doubt, very important, and yet it seems the care of that part of the body politic—and they must relatively be much the larger number—who are self-supporting in sickness as well as in health, should not be relegated to a secondary place.

Again, perhaps not 10 percent of the medical profession have teaching hospital affiliation, and certainly the 90 percent who are outside the teaching hospital, with the patients they care for and the hospitals they attend, do not deserve at the hands of hospital experts a place of secondary importance.

The question to be considered, therefore, as I understand it, and the only question, is the division of hospitals into various types, without any reference whatever to the comparative importance of the various types. I am not stating this in a controversial spirit, but with the idea that we shall the quicker reach some agreement, in seeking the establishment of some certain percentages by which we



can estimate and standardize hospitals, if we get a common viewpoint.

I believe there are certain essentials that are common to all hospitals; that is, certain basic things without which a hospital cannot effectively serve its primary purpose of caring for the sick, and that a hospital reaches its full effectiveness as it becomes perfect in these basic things. These are:

1. Nursing—whether graduate or undergraduate.
2. Laboratories—all branches.
3. X-ray departments.
4. Dietetic department.
5. Pharmacy.
6. Records and accounting.
7. Architecture, including all primary installation.
8. Equipment—medical, surgical, and physical.
9. Administration.

It will be noticed that I do not include the Dispensary, Out-patient and Social Service Department. In my view this is really a by-product of the hospital, and according to my understanding of a hospital does not cease to be any the less an effective agent for the proper treatment of hospital cases—the primary purpose for which hospitals were instituted—because it lacks an outside service department. Neither have I figured a "hospital staff" as a basic part of a hospital organization. If it were otherwise, it would go rather hard with the 80 percent or 90 percent of physicians who are not on any hospital staff and yet who must effectively care in hospitals for cases that develop in their practice. Of course, it goes without saying that the physician in general practice, if he is competent to handle office and residence work—and if he is not he should be barred from doing any medical work at all—should be given an opportunity of effectively following up his hospital cases without interference from any source.

May I be permitted to say in this connection that, with the best intention in the world, it is almost impossible for the staff hospital to give a non-staff physician the service and protection he should receive? The staff members quite naturally are the dominant members in a staff hospital. The officers and employees are consciously or unconsciously affected thereby. The patients of non-staff physicians are in an atmosphere that, if not actually hostile to their physicians, is so extremely favorable to the staff physicians that patients cannot help but be influenced. Admitting this condition, I claim that a "medical staff" should not be regarded as a basic part of a hospital. This hospital, for example, is without a visiting staff and should not be asked to accept a secondary rating on that account.

Quite naturally, then, percentages affecting these two departments—Staff Service and Out-Patient Department—must come out of the reckoning so far as this type of hospital is concerned. It would seem that the best way to approach the subject is first to divide hospitals into various types, and each type then into various classes, depending on the quality of service. I would suggest the following types, the order in which they appear being without any reference whatever to their relative importance:

Type 1. Teaching hospital. I have no criticism to offer as to the departmental division of percentages your committee has reached.

Type 2. Institutional hospitals. This may include state, county, and municipal hospitals where no pay patients are received. It may also include industrial hospitals, railroad hospitals, etc., where no pay patients are received. I assume the same classification would answer as in Type 1.

Type 3. Religious, charitable, and semicharitable hospitals. It might include also hospitals organized on the membership plan. These are all staff hospitals. There is this distinction, however, that pay patients under the care of non-staff physicians are received. This type will demand a different division of percentages, at least in so far as that part of the work is concerned relating to pay patients, as in respect to these there must be an elimination of staff percentages.

Type 4. This is represented by such institutions as ours, where there is no visiting staff and where the patients of all reputable medical men are received. The only point to be considered in estimating the degree of hospital effectiveness reached is the kind of service offered to the visiting physician and surgeon—the extent and character of the facilities given him for the proper care of his patient in the basic hospital essentials I have already mentioned. I would suggest for discussion in this type the following percentage allowances:

- |  |     |
|--|-----|
| 1. House staff and nursing staff (graduate or training school) ..... | 20% |
| 2. Laboratories .....  | 10% |
| 3. X-ray .....   | 10% |
| 4. Dietetic .....  | 10% |
| 5. Pharmacy .....  | 5%  |
| 6. Accounting .....  | 5%  |
| 7. Architecture .....  | 15% |
| 8. Equipment .....   | 15% |
| 9. Administration .....  | 10% |

There is another element which is by no means negligible, but which I have not inserted in these percentages, and that is the atmosphere that can be created in such type of hospital of mutual help and mutual development for physicians who are using the hospital. This is done by the creation of clinical societies for the presentation of cases and the discussion of medical questions. If this is to be considered as a departmental division because it ultimately helps the patient in the improvement of the medical service, then I would suggest a rating of 5 percent and a reduction of Accounting and Pharmacy divisions to 25 percent each.

I might say that in approaching the question of operating this type of hospital we have endeavored to give due importance to the competitive angle, that is, the developing of the hospital by furnishing service that is more attractive to the patient and the physician than can be secured elsewhere. This quite naturally counts for greater efficiency. In fact, there is no surer test of measuring standards of efficiency than that service is successful in a competitive way. As a general proposition it may be stated that the hospital that is sought after by the sick and injured in any community and by the physicians in any community, and that is enlarging and expanding because of increased patronage, requires no other appraisal to mark it as a Class A hospital in that community. I realize, of course, that such a situation can apply only where patients pay for their accommodations and cannot apply to charitable or semicharitable or teaching hospitals. The element of competitive efficiency is necessarily lacking in such institutions.

Type 5. This is the private hospital, limited to the patients of a single physician or a group of physicians.

Having divided hospitals into various kinds or types, we come now to a division of the types themselves, depending on the quality of the service. This division, I assume, would be an alphabetical division. I do not know what your committee contemplates in this direction—whether it intends to fix various classes, like Class A, B, C, D, etc., with the requirement that each class must not

go below a certain minimum in any of the divisions. For example, Class A must show an efficiency of 90 percent and over in all divisions; Class B, an efficiency under 90 percent but 80 percent or over; Class C, an efficiency under 80 percent but 70 percent or over, and so on. There is, then, a numerical division representing types and an alphabetical division representing quality.

If there is a quality division, on the basis outlined above, it might be necessary to divide Type 1, that is the teaching hospital, if there are teaching hospitals without outside service sections. It certainly would not be equitable to deprive a teaching hospital of the highest rating so far as the primary purpose of a hospital is concerned if such a hospital showed over 90 percent efficiency in nine departments, and yet did not have an outside service department. If this should create another type, of course the rating would necessarily be rearranged. Perhaps, however, it is intended to get the total percentage of efficiency in the various departmental subdivisions and fix the rating on this basis, which might result in the hospital getting a fairly high rating because of great efficiency in some departments while there may be defective service in other departments.

I believe it will be found very difficult in actual practice to formulate a plan of standardization that will convey more than a general idea of the relative standing of hospitals, but I suppose the committee has in mind only some general classification and standardization.

I have gone perhaps rather far afield in my answer to the question you propounded, because of certain misapprehensions that may exist on the subject of the type of hospital we operate and because I feel that in any standardization that could fairly take in a hospital of this type it would be well that you and those associated with you in this work should see the subject from our viewpoint. We have in many ways gone outside the accepted hospital field in an endeavor to take care of that part of the population who are able to provide for themselves—and who wish to provide for themselves—all the reasonable facilities and even comforts that can be purchased through periods of sickness and of injury. We desired in this connection, too, to give those members of the medical profession—the large majority of the profession—who were not on hospital staffs, a fully equipped hospital where they could effectively care for the severer cases that developed in their practice with as little interference with the patients and with the treatment as would follow if such facilities could be provided at patients' own homes, consistent, of course, with such supervisory control, professional and otherwise, as will insure the maximum of protection to the three parties so vitally interested, viz., the patient, the physician, and the institution.

I want to say in conclusion that I have replied at such length because of a realization that you and your committee desire a full and free discussion of the subject and that thereby we may all be stimulated to reach a greater degree of efficiency.

JOHN J. O'CONNOR.  
Superintendent, St. Francis Hospital.

#### At a Red Cross Examination

"How would you prepare a sitz bath?"

"Fill the tub with warm water, and as much sitz as the doctor recommends, the amount of sitz to depend on size of patient."

The foregoing brings to mind the great moment in the life of Archimedes. The amount of sitz gave him the key to a perplexing problem.—B. L. T., in *Chicago Tribune*.

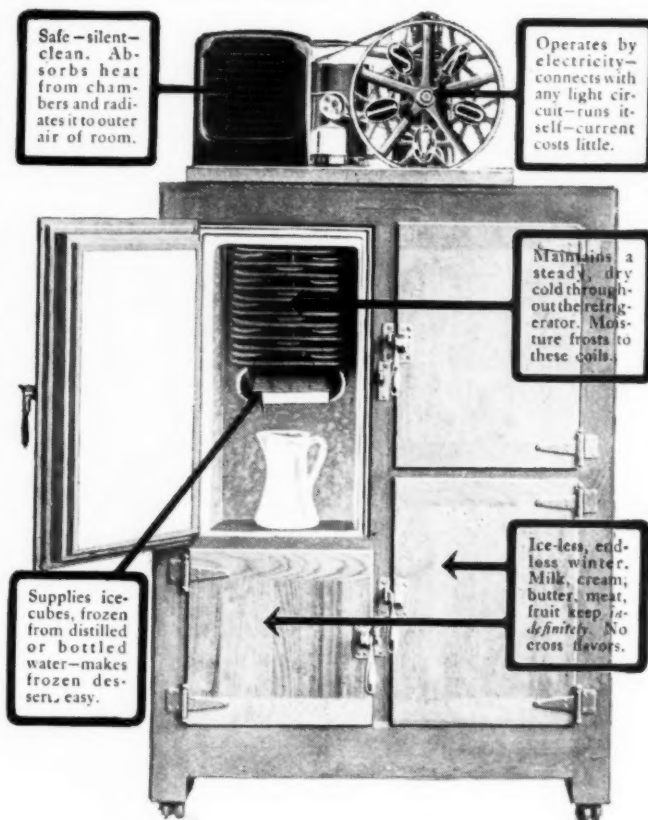
## NEW INSTRUMENTS AND EQUIPMENT

VINCENZ MUELLER, Technical Editor.  
GEO. W. WALLERICH, Associate Editor.

Please address items of news and inquiries regarding New Instruments and Appliances to the editor of this department, 327 Southeast avenue, Oak Park, Illinois.

### Isko Refrigerating Unit

Refrigeration has long been a vexing problem in hospital management. The great drawback to the ideal service arrangement—an individual refrigerator for each ward or group of wards, private rooms, diet kitchen, pathological laboratory, etc.—has meant the necessary visits of the iceman with his dripping, ill-protected burden. But the most serious deficiency of ice-cooling has been the inade-



Isko refrigerating unit attached to an ordinary refrigerator.

quate and fluctuating character of the cooling itself—cold enough to safeguard the perishable foods necessary for patients for a few hours after the ice supply has been replenished, but mounting nearer and nearer each hour to the danger line where fermentation and decay set in and the foods become unfit for use.

The safe and economical range of temperatures for keeping foods is well known to every hospital director and the physicians of his staff. But it is only recently that invention and research have supplied an answer to the



problem of providing individual ward refrigerators that hold the safe, low range of temperatures which science now demands, yet bar out the iceman and his doubtful freight forever.

Isko is an automatic refrigerating unit which can be installed in almost any icebox. It can be carried in by two men, can be put in place in a short time, and connected with the nearest electric light socket in twenty seconds. Thereafter Isko requires no attention. Its action is controlled by a thermostat so sensitive that a rise of 2 or 3 degrees inside the refrigerator starts its operation. The thermostat is adjusted for the standard best temperatures for keeping foods. From 44 to 48 F. is the safe and economical range—cold enough to render inactive the bacteria of decay, which exists in all perishable foods. In addition to its food-protecting function, Isko freezes a daily supply of pure ice-cubes for cooling water. In the designing of hospitals, therefore, Isko eliminates the problem of providing icing facilities by entirely eliminating the iceman. It is a piece of machinery almost noiseless, is self-lubricating, and requires little more care to keep it in order than an electric fan.

The unit fits any refrigerator, old or new. It has a cooling capacity equal to 200 pounds of ice melting daily. Removing of a panel from the top of the refrigerator above the ice-chamber is the only change necessary to install it. No plumbing is required.

#### Hotpoint Hedlite Heater

The electric heater illustrated here has recently been placed on the market and is known as the "Hotpoint Hedlite Heater." It is built on the principle of a portable lamp and commends itself for use in heating bathrooms and other small rooms, under the table, at the bedside, etc.

This heater is substantially built of pressed steel, with highly polished nickel finish. The reflector is copper-



Hotpoint Hedlite heater.

plated and polished. It is adjustable, being fastened to the upright by a hinged joint, thus permitting the heat rays to be directed parallel to the floor or diagonally upward.

An exclusive feature of the heater, and one that makes it absolutely safe to use, is the manner in which the base is weighted. The treatment here is such that, should the heater be accidentally upset, it will immediately right itself, with heating element point upward. This eliminates any danger of fire, should the heater be upset while current is turned on.

Added to its safety is the fact that it provides pure, unadulterated warmth, which is conducive to good health, as it does not vitiate the air as do fuel-burning heaters. It is exceptionally convenient, operating from any electric wall or lamp socket, is light in weight, and, with handle

at the back of reflector, the heater may easily be carried from room to room.

Too much cannot be said in favor of the use of such a heater in the home, sanatorium, hospital, office, etc., during damp, chilly weather, before permanent heating installations are in use, for the cold corner, at the bedside, or the invalid's chair.

#### Fumigato—A Permanganate of Potash Substitute for Fumigation

It is generally agreed among men of experience in hospital work that formaldehyde gas is the only really effective method of fumigation, and previous to the present war permanganate of potash was the agent used for expelling this gas.

During the last two years, however, the cost of permanganate of potash was prohibitive for fumigation purposes; it is at present quoted at about \$5.50 a pound, and, as one-half pound is necessary to expel enough gas to fumigate a room of 1,000 cubic feet of space, its use has practically been abandoned.

On account of this shortage of the proper materials, many institutions were compelled to fall back upon the older methods which they had previously abandoned, such as spraying formaldehyde solution with an atomizer, boiling formaldehyde over an alcohol flame, as well as the use of sulphur, etc., on the theory that these methods were at least better than no fumigation at all.

Several manufacturers have made an effort to produce a satisfactory substitute to take the place of permanganate of potash, with more or less success, but the Neale Chemical Company, of Cleveland, O., has put a good substitute on the market, under the trade name of "Fumigato." The manufacturers state that this preparation is not in itself a fumigant, but is an agent taking the place of potash used in the expelling of gas from formaldehyde, and that the contents of one box of "Fumigato," costing about 14 cents, will liberate every atom of gas in one pint of formaldehyde and do the work quickly and thoroughly.

Upon inquiry at several well-known hospitals that have been using this material for some time, we have been informed that it has proved very satisfactory, and as the compound is comparatively cheap, it seems well worth while for any institution to give it a thorough trial.

#### The Thoma-Levy Haemacytometer

It is gratifying to note that our American manufacturers of scientific apparatus are proving themselves equal to the occasion in producing appliances requiring the greatest precision in construction, to replace those formerly made abroad.

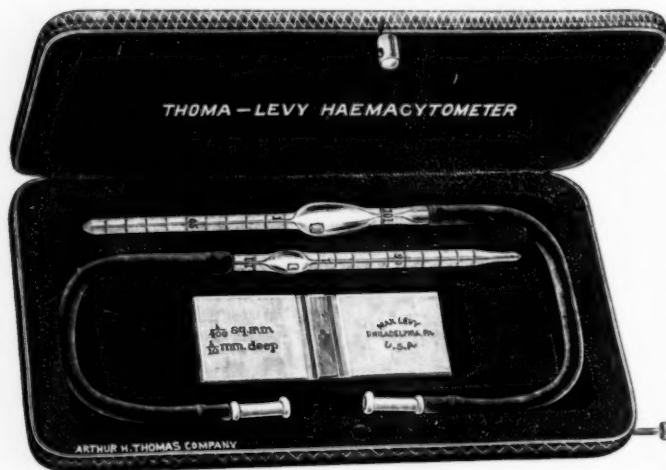
The situation as regards haemacytometers, for instance, has been a critical one during the past two years, because prior to that time practically no haemacytometers were made in this country. Several manufacturers have now become equipped for the production of haemacytometers.

One of the latest is that made by Levy, in which the principle of the Bürker haemacytometer is used. This firm has been known for many years for the excellence of their screens for the half-tone process, diffraction gratings, etc.

In the old type of Bürker chamber two ruled areas are provided on rectangular pieces of glass cemented on the main slide. These ruled rectangles were separated by a small moat to allow free passage of the diluted blood. On either side of these ruled rectangles two un-

ruled rectangular pieces of glass were cemented, which extended the entire width of the slide. These were exactly 0.1 mm. thicker than the ruled rectangles, so that when the cover glass rested on these the required depth of solution over the ruled area was attained.

In the Levy construction a rectangular depression is cut into the slide itself extending across the entire width. In the middle of this depression is permanently fixed a rectangular strip of glass, also extending entirely across the slide, and on this are the rulings. When the cover glass is placed in position on the slide itself the solution over the ruled areas is of the required depth. The Levy method of construction avoids the cemented cell and the attendant danger of its loosening by the drying out of the balsam cement, and the possibility of the loosening of the ruled counting surface is also greatly reduced by this construction. The parallel form of cell greatly facilitates cleaning as compared with the circular type and the method of ruling used in the manufacture of these chambers provides a line with absolutely clean-cut edges and of distinctly increased visibility when the chamber



Thoma-Levy haemacytometer.

is filled with solution for the count. This increase in visibility of the ruling greatly lessens the eye fatigue experienced in making repeated counts.

The Bürker type of counting chamber, of either the new or old construction, has a further advantage over the original Thoma construction, which consists of a circular ruled disc cemented on the slide in the center of a circular cell, also cemented on the slide, in that capillary attraction is used to fill the Bürker cell after the cover glass is in position. This method insures a much more uniform distribution of corpuscles over the entire field, and the effect of atmospheric pressure on the depth of the solution is materially lessened. These new Thoma-Levy counting chambers of the Bürker type are now supplied with the most used rulings, i. e., Thoma, Zappert, Turk, Neubauer, Fuchs-Rosenthal, etc. The Neubauer ruling is now recommended as the most satisfactory for modern technic.

I'd rather be a Could Be  
If I couldn't be an Are,  
For a Could Be is a May Be,  
With a chance at touching Par;  
I'd rather be a Has Been  
Than a Might Have Been, by far,  
For a Might Have Been has never been,  
But a Has was once an Are.

—Ladies' Home Journal.

## A TRAINING COURSE FOR OCCUPATIONAL EXPERTS

### Demand for Trained Directors of Industrial Work in Hospitals Met by New College Course

BY ELIZABETH G. UPHAM, Director Art Department, Milwaukee-Downer College, Milwaukee, Wis.

Milwaukee-Downer College, Milwaukee, Wis., is one of the first institutions to recognize the new profession open to women of directing industrial work in hospitals. There is an increasing demand for such trained specialists, and a new and interesting field of social work is opening. Not only has the work a definite and therapeutic value in the medical program of institutions, but it has also the deeper social significance of adjusting the subnormal to economic life.

As thousands of wounded and disabled soldiers are turned back upon society, the warring countries are face to face with the problem in all its acuteness. Every disqualified soldier who can be trained into the industrial army and who becomes an independent wage-earner adds to the resources of the country, while every one who cannot increases the drain of dependents. Idleness and unproductiveness on the part of a large population, together with the multitude of ensuing social wrongs, undermines the vitality of a country and proves in reality a far greater liability than pensions or war debts. There is consequently a great demand in Europe and Canada for those trained to direct industrial work for the handicapped, who thereby not only facilitate the patient's recovery, but also make his convalescence a period of vocational training. On the mental, moral, and physical rehabilitation of convalescence depends the economic independence and the future welfare of thousands of citizens. If this country is to become seriously involved in the war, such training and such experts will be indispensable. It is as great a service to one's country to recognize the discards of war and rehabilitate them physically and industrially for life as to produce fighting men for the front. Each day the war is prolonged the stream of outgoing men is lessened and the current of incoming and incapacitated men is increased. Each day of war, therefore, increases the need for the work of rehabilitation and adjustment, and, in so far as the problem has been successfully met, just so fast will the nation rally from the burdens and depressions which inevitably follow war. It is a problem of reconstruction and civilization. In order that this country may be prepared to meet this possible crisis, Milwaukee-Downer College is offering in its curriculum those subjects which will best prepare the industrial directors for their great task. The course as outlined has an advantage over many other lines of preparedness, in that it is training which need not wait for the acute condition of war to make it necessary. The demand for occupational directors in the hospitals and sanatoriums of this country is already greater than the supply of those trained to meet it.

Milwaukee-Downer College has studied the kind of training which best prepares the student to become an industrial director of the handicapped. It is an intimate knowledge of the medical and social condition of the subnormal, together with technical proficiency. Experience has taught that the nurse and doctor are not qualified to direct this work. The medical aspect of the problem is skillfully handled by them, but they lack the long practice necessary to technical industries. They, therefore, cannot know the full possibility of every process. Moreover, they have not the economic background, the knowledge of competitive markets, and the efficiency of a real shop or fac-



tory, without which the patient may be cured but not adjusted to the conditions he must inevitably meet. On the other hand, the shop boss or expert cannot adequately meet the requirements. His is a limited point of view, failing to understand the close connection between the physical condition and the impaired capacity. However well his shop may be organized or however expert his technical skill, he will fail with the subnormal unless he has the social background, the intelligent sympathy of understanding, and the medical point of view which renders the work of great therapeutic value, instead of being worthless, if not positively harmful. It is because technical knowledge and the medical and social points of view must be equal in importance that the course of study at Milwaukee-Downer College is divided into two classes, the academic and the technical. In the academic are included the cultural subjects for a wide background, a thorough knowledge of economics and sociology, and a careful program of medical reading. The student must know the particular treatment of tuberculosis, its possibilities and limitations, must understand the mental points of view to be encountered in consumptives, and must adapt industries which not only are suitable and helpful in convalescing, such as work requiring deep breathing without being heavy, and free from dust and fumes, but which also will be commercially profitable for the patient to follow when recovered. Rheumatism, arthritis, heart trouble, neurasthenia, insanity, etc., are all different and require not only their special medical programs, but their special occupational treatment as well. This is a part of the medical background required of students. The technical courses include the study of the theory of design, applied and industrial arts, and training in special industries in factory or shop. The course in industrial arts has a unique feature especially adapted to students preparing for this profession. Not only does the student learn to teach a craft, but the various processes involved in hand work and the ways of presenting each process are studied in themselves. Thus it is known how to stimulate the brain through the hand, how to develop purely manual skill, and how to coordinate both hand and mind. It is this detailed study of occupation in close correlation with the pathological study of disability which prepares the student for the special field of directing industrial work for the handicapped.

### THE JEWISH HOME FOR CHRONIC INVALIDS OF ST. LOUIS

#### Personal Care and Individualization the Strong Points of This Small Institution—Rest, Food, and Fresh Air Held of Cardinal Importance

BY ELIZABETH S. KAPLAN, Superintendent, and SELIG SIMON, M. D., Medical Director, Jewish Home for Chronic Invalids, Anglum, Mo.

The Jewish Home for Chronic Invalids cares for patients suffering from pulmonary tuberculosis in all stages. It is ideally located in St. Louis County, Missouri, about ten miles northwest of the city of St. Louis. An electric railway, with a twenty-minute schedule, runs within one-half mile of the institution, making it easily accessible for patients' relatives and friends.

The buildings are situated on a fifty-acre tract of gently sloping ground, and bounding it on all sides one sees the thrift of earnest, prosperous farmers, a fitting prospect for those city-driven cripples whose future looms brighter amid the freedom of the country. The group of buildings consists of the administration building, the Shoenberg Memorial, a permanent structure for moderately advanced

and far advanced cases, and two frame structures for early cases.

The Shoenberg has accommodations for twenty-five patients; the "shacks" for eighteen each, making a total capacity of sixty. In the administration building are located the officers' quarters, the executive office, consulting rooms, examining room, laboratory, dining rooms, general kitchen, laundry, employees' quarters, sterilizing room, warehouse, store rooms, refrigerators, etc. The engine house is attached to the rear of the administration building. Each of the buildings for the care of the patients is equipped with every modern convenience approved along the latest advanced lines.

Our institution is small, and therein lies its strength. Patients come under the personal care of our medical staff, and the medical status of each patient is always known. Each patient is seen at least twice daily. It is our aim to cure our patients, not to build up statistics. All patients when admitted are put to bed, and no patient, no matter how apparently mild his infection, is permitted up for the first two weeks. In this way we can study our patients under ideal conditions.

The temperature, pulse, and respiration are taken rectally, with the thermometer in situ five full minutes. It is important that the temperature, pulse, and respiration be taken at definite stated times, for instance, as soon as the patient awakens, when the recuperative benefit of a refreshing sleep is at its maximum, and when abnormal changes in the temperature, pulse, and respiration, mean, with other findings, the onward progress of the disease; just at the noonday meal, when the energy requirements of the patient reach their maximum for the first half of the day; immediately following "rest hours," the time of day when tuberculous patients usually show their greatest departure from normal; and at "bedtime," or the end of the day.

These, then, are taken with the patient under ideal conditions, and if they and other observations continue within normal limits, we infer that such a patient, living under such ideal conditions, could continue normal indefinitely. We then pitch his energy requirements proportionate to his apparent improvement.

We value our treatment in the order of importance, as follows: rest, food, fresh air. We do not, for instance, ventilate a person's lungs with cold air below zero and freeze the patient. Every patient is different; some thrive on cold air, others freeze on it. Tuberculosis care spells individualization. There is a vast difference between fresh air and air that chills the body, keeps the patient awake, and defeats its very purpose. Further, whenever we have extremely severe weather for any extended period of time, we invariably have upper respiratory tract difficulties, and this adds another obstacle to our already heavy load.

All patients are "strapped" over any area of activity, and the adhesive is reapplied every ten to twelve days. At times the improvement is truly marvelous, and can be explained only on the basis of limiting the involved area's expansion. All hemorrhages, when capable of localization, are likewise "strapped" in addition to usual routine measures.

Patients cough into gauze saturated with an antiseptic capable of inhibiting bacterial growth. Every patient receives a supply of "gargle mixture" each day for use two or more times. If too weak to gargle, it is sprayed over the pharynx and mouth. This minimizes throat affections.

Once every week the ambulant patients hear a talk on tuberculosis, and their knowledge of the disease constitutes a valuable part of the treatment. The nursing staff is

specially instructed in the intelligent and careful handling of each patient, and thus much irritation and complaint is avoided on all sides. When possible, the patients are offered such suitable positions as can be found on the premises, and in this way an opportunity is given to weigh their strength and prepare them for the harder tasks of life under less favorable surroundings.

An auxiliary board consisting of many prominent women of the city is actively engaged in looking after the welfare of the patients, procuring all sorts of amusements for them, such as weekly moving picture shows, concerts, outdoor and indoor games, reading matter, etc. Each building has a victrola with a good selection of records. Religious services are held weekly, being conducted by prominent Jewish rabbis and their choirs, and are greatly enjoyed by patients of all creeds.

A follow-up committee looks after the welfare of the patients after they leave the institution and helps them to find suitable quarters and employment.

#### SOME GUIDING PRINCIPLES OF INSTITUTIONAL LIFE

##### The Official Creed of the Kankakee State Hospital

A copy of the following "creed" is furnished to each employee of the Kankakee State Hospital before he or she goes on duty. It contains so many good suggestions that we reproduce it here for the benefit of other institutions:

##### OUR INSTITUTION CREED

When you became an employee of the *Kankakee State Hospital* you became a member of our official family. We feel that our family is *respectable, loyal, and efficient*, and we trust that you will be likewise. We consider you as such in every way unless you are proven otherwise. We have confidence in you and expect that you will be worthy.

The management of this institution will be *fair* to you, therefore be fair to it.

Our institution is like a great machine, made up of many parts. We are each of us one of the parts. Just as a machine is not apt to run smoothly when any of its parts are out of commission, just so our institution's efficiency is apt to suffer when any of its employees fall below the *proper standard*.

We believe that the best guide for the proper performance of our duty is our *conscience*. An employee whose conscience cannot be appealed to is not worth having.

Our positions constitute a *real trust* imposed by the people of the state, and we should prove by the quality of our service that we are *worthy of such trust*.

We should not do, either within or without the institution, anything which may *cast a reflection* upon the good name of our official family. The misconduct, carelessness, and mistakes of any one of us are apt to reflect unfavorably on all.

We strictly believe in *temperance*. We believe that drunkenness on the part of an employee at any time or any place is a serious offense and will not be tolerated under any circumstances. A drunken man is irresponsible and untrustworthy.

Our *patients* are the unfortunate brothers and sisters, husbands and wives, sons and daughters of our fellow citizens of Illinois and are just as dear to their kin as our own are to each of us. Therefore, *never mistreat* a patient either by word or deed. Unkind words often hurt more than blows. It is just as easy to use kindly words as unkindly ones. To our unfortunate charges kind words mean a great deal. There can be nothing more wicked than deliberately adding more pain to the life of any one who is helpless and has already sufficient sorrows. *Treat them as you would like to be treated yourself under like conditions*.

We are entrusted with the *taxpayers' money* and we have no right to waste any part of it. The most careful *economy*, consistent with *efficiency*, must be observed in every department. If anything, we should watch over the

property of the state even more carefully than we would over our own.

There are many ways in which we can assist in saving money. Hundreds of dollars' worth of wearing apparel, furniture, and other things too numerous to mention are destroyed each year by patients, which might have been prevented by the watchful care of the employee. All departments, but especially our mechanical divisions, should be in every way careful that no new material is used when old material might do as well.

Let us be fair to our official superiors and to our fellow employees. *Do not be a "knocker," be a "booster."* Whenever we "knock" the institution that furnishes us our bread and butter we "knock" ourselves because we are part of that institution.

Let us *speak kindly* of all. Our institution is not big enough to hold the slanderer or the gossip. Whoever tries by malicious means to injure another will find no place here. It is expected, however, and demanded that all matters of importance reflecting upon the good of the service and substantiated by proper proof be reported to the authorities.

The managing officer of this institution is your *friend*, but is not willing to purchase the friendship of any one by being a "*good fellow*," if by so doing he has to neglect his own duty in the protection of the interests of the state. The only "*pull*" that holds good is *faithful and efficient service*.

*When you play, play hard. When you work, don't play at all. There are hours set aside for both.*

*Honesty is always the best policy.* We have no more right to unlawfully take things from the state than from a private individual. In case of distress or need in the family, appeal to the managing officer and he may possibly find means of assistance. Do not sacrifice *self-respect* for the sake of ill-gotten gains.

*Proper discipline* is essential in order to produce good results. We must be obedient to the requests of our official superiors. We must be like soldiers in carrying out orders. When we think injustice has been done we have the right to appeal, but we should appeal only after obeying.

In an institution of this kind *cleanliness* is surely next to *godliness*. *Nothing is clean enough that can be made cleaner.* We cannot tolerate, either inside or outside of wards and buildings, anything which is not sanitary. *Uncleanliness means disease* and we must prevent disease.

If we observe all these suggestions we will get along *nicely* and give satisfaction to the service. We then will be good citizens, as well as good employees, and a credit to our state.

Sincerely yours,

EUGENE COHN, M. D., Managing Officer,  
Kankakee State Hospital, Kankakee, Ill.

September 5, 1917.

NOTE.—Heads of departments must furnish a copy of "Our Institution Creed" to every new employee before he or she goes on duty.

#### HOSPITAL STANDARDIZATION IN CHINA

##### Special Problems of Mission Hospitals—Efforts Toward Standardization

The problem of the standardization of mission hospitals is discussed in a recent number of the *China Medical Journal* by Dr. Henry S. Houghton and also editorially by the journal itself.

Dr. Houghton remarks that the average medical missionary comes to China with sound professional equipment, but with small realization of the many delicate and complex administrative details which will be demanded of him. At home he had no responsibility for the hospital mechanism, and consequently he has acquired no training in its control. In China he is at once confronted with the problem of the organization of the hospital staff, the training of assistants and nurses, bookkeeping, the registration of patients, the assembling of records, the ordering of diets, and the kitchen, good housekeeping, etc. In the past it has been a common procedure to put the responsibility of



planning the building and equipment of a new hospital and determining its scope on a missionary physician who has just completed his period of language study. Authoritative standards would for these various reasons have a peculiar value in the missionary field.

In this connection the *China Medical Journal* in its editorial pages refers to the series of papers on standardization now appearing in *THE MODERN HOSPITAL* and to the other efforts now being made in the same direction, remarking, however, that "circumstances in the foreign field are so different that, speaking generally, any home system of standardization must be accepted as an ideal toward which to move, rather than the goal of possible accomplishment within a short time." A scheme of standardization worked out by the medical committee of the Eastern Asia Conference allots 25 points each to staff, physical equipment, house management, and evangelistic efficiency. In detail the scheme is as follows:

I. Staff, 25 percent.		Percent
1. 1 foreign physician for every 60 patients.....	4.5	
2. 1 foreign nurse for every 60 patients.....	4.5	
3. 1 native graduate physician for every 60 patients.....	4.5	
4. 1 native graduate nurse for every 60 patients.....	4.5	
5. 8 student nurses, 4 orderlies, and sufficient servants.....	4.5	
6. Adequate provision for furlough and superintendence during the summer months.....	2.5	
	25.0	
II. Physical Equipment, 25 percent.		
1. 500 cubic feet of air space for each patient. Ceilings not less than 11 feet high. Windows not less than 3 by 6 feet and found on at least two sides of all rooms larger than 200 square feet. Openings for ventilation on one other side.	2.0	
2. Floors polished or so finished as to be readily cleaned and giving no cracks or corners for lodgment of dirt. Walls and finishing woodwork devoid of ledges and other places for the lodgment of dust.....	2.0	
3. Iron beds for patients. Bedding furnished for each patient, adequate and cleanly. Hospital clothes for patients, adequate and cleanly.....	2.0	
4. Hospital buildings, kitchen, latrine, etc., adequately screened.	2.2	
5. Miscellaneous furniture—chairs, medicine cabinets, bedside tables, reclining chairs, etc.—adequate and sanitary.....	1.0	
6. Lighting, both natural and artificial, should be suitable, adequate, and cleanly. Heating facilities should be sufficient..	1.0	
7. Auxiliary rooms. Each ward of 8 or more beds should have its own bath, nurses' utility room, and water-closet or commode facilities, which should be adequately furnished, light and sanitary. Linen rooms, store rooms, janitors' closets, should be suitable for uses designated.....	2.2	
8. Adequate stairways, hallways, and verandas, suitable fire protection and means of escape.....	1.0	
9. Operating room. The lighting should be adequate and the floor and walls free from crevices, and rooms should be furnished with aseptic operating table and instrument table. Suitable instrument, dressing, and medicine cabinets. Suitable scrub-up arrangements for the surgeon. Sterilizing room should be separate and equipped with adequate sterilizers for water, instruments, and dressings....	5.4	
10. Laboratory. Should be light, clean, and adequately equipped with microscope, centrifuge, chemicals, glassware, alcohol stoves, etc.....	2.2	
11. Accommodation for kitchen, laundry, storehouse, and servants .....	2.0	
12. Adequate provision for contagious cases, also morgue.....	1.0	
13. Suitable residences for doctors and nurses and native assistants .....	1.0	
	25.0	
III. House Management, 25 percent.		
1. Nursing system—competence and discipline of nursing staff and comfort and well-being of patients.....	6.5	
2. House service system—competence and discipline of servants and orderlies, and cleanliness of buildings.....	6.0	
3. Food system—competence of cooking and serving, and competent arrangement for a special diet.....	6.5	
4. Laundry system .....	6.0	
	25.0	

#### IV. Evangelistic Efficiency, 25 percent.

1. Pleasant and convenient chapel and sufficient and suitable literature for distribution.....	6.0
2. Sufficient competent evangelistic workers—I. e., preacher and Bible woman .....	6.3
3. Cooperative and direct work of foreign physicians and nurses in preaching to patients and evangelistic teaching of nurses and staff.....	6.4
4. Bible teaching and preaching by native assistants and nurses .....	6.3
	25.0

Two points of special importance, as suggested by the *China Medical Journal*, are the proper number of beds and the strength and character of the staff. The first question is important because, as hospitals are very few and cases of disease are exceedingly numerous, there is a great temptation to open hospitals too large for ordinary mission resources to staff and equipment. It is suggested that, except in large centers and unless there are ample financial resources and a strong medical staff to be relied on, the limit should be sixty beds.

#### West Virginia Hospital Association, a Correction

Some errors appeared in the list of officers of the West Virginia Hospital Association in our November issue, page 357. The list should have read: president, Dr. W. A. McMillan; first vice-president, Dr. C. S. Hoffman; second vice-president, Dr. A. H. Kessler; third vice-president, Dr. R. E. Vickers; secretary and treasurer, P. O. Clark.

#### Screens\*

(In a Hospital)

BY W. M. LETTS

They put the screens around his bed;  
A crumpled heap I saw him lie,  
White counterpane and rough dark head,  
Those screens—they showed that he would die.

They put the screens about his bed;  
We might not play the gramophone,  
And so we played at cards instead,  
And left him dying there alone.

The covers on the screen are red,  
The counterpanes are white and clean;  
He might have lived and loved and wed,  
But now he's done for at nineteen.

An ounce or more of Turkish lead,  
He got his wound at Suvla Bay;  
They've brought the Union Jack to spread  
Upon him when he goes away.

He'll want those three red screens no more,  
Another man will get his bed;  
We'll make the row we did before,  
But—Jove!—I'm sorry that he's dead.

\*From "The Spires of Oxford," a volume of war poems by Winifred M. Letts, published by E. P. Dutton.

The enormous influence of spiritual environment, of friendship, of happiness, of beauty, of success, of religion, is grievously, ludicrously underestimated by most physicians, nurses, and hospital superintendents. There are diseases that cannot be cured without friendship, patients that never will get well unless you can get them to make a success of something, or to conquer their own self-absorption by a self-devotion, losing their life to find it.—Richard C. Cabot, "Social Service and the Art of Healing."

## HINTS FOR HOSPITAL SUPERINTENDENTS

### Prepare to Do Some Painting

Now is a good time to think about doing some pretty general painting in the hospital, especially if you hire your painters by the day. Outside commercial work is slowing down now, or will do so as soon as the inclement weather comes, and a good many painters will have to be laid off unless they can find inside work. Oftentimes you will be able to hire even union men by the week or month in the winter time when you would not be able to do so during the spring and summer busy season.

### Organization of Mechanical Forces

A good organization of the mechanical forces of the hospital can almost always be attained even in a small institution. Place the repair and upkeep work under your engineer. Keep a night engineer or fireman who knows something about plumbing, steamfitting, and water pipes. If you keep a carpenter, place him under the engineer also, and if you send out for a carpenter to do repair work, the engineer will be able to direct that work and keep check on time and bills better than anyone else. There should be a requisition form for all repair and alteration work, with spaces for time, material, and other necessary data, as to who did the work, when begun, when completed, and what it cost.

### Courtesy in the Front Office

Better get a line occasionally on just what your front-office people are doing about the reception of visitors, promptness of service, courtesies, etc. Many a disgruntled friend of a patient has been smoothed out at the front office, when he might have gone away to make a lot of trouble. And many a liberal donation has been headed off by discourtesy at the front door.

Sick people and their relatives and friends are not under the best mental condition in the hospital, and it is as necessary a service to calm their feelings and soothe them mentally as it is to treat the disease—and courtesy costs so little.

One of the greatest hotel men in this country has a rule in all his hotels that "the guest is always right and the hotel is always wrong." If we could inculcate this ideal in our hospitals it would do much good.

### Buying in War Time

Do not buy cheap things for your hospital just because good things come high. Especially just now there is a wider difference between the price and actual value of cheap things than there is in the matter of good things. We do not know how long this war is going to last, but we have every reason to expect that prices are going to remain pretty well up. A good commodity of any sort, which will last twice as long as a poor commodity, is worth a little more money, and superintendents and buyers for hospitals cannot afford cheap, short-lived commodities.

This is especially true in regard to hospital furnishings, beds, tables, bedding, linen and cotton goods, floor coverings, kitchen and laundry utensils, rubber goods, and janitor supplies; these are all things that last in proportion as they have high quality, and there never was a time in the hospital world when high quality was so greatly in demand as it is right now when even cheap things cost so much and when good things are so much better and will last so much longer.

### Superintendents, Take Note!

The whole atmosphere of this country under the stimulus of the war and the feverish anxiety of the whole people to leave no stone unturned that will promise better health for everybody point to the establishment of some definite hospital standards. Superintendents had better take this to heart, because, with the demand for better hospital conditions, there is also coming a demand for trained, studious, courageous, and aggressive administrators, men and women who will study intelligently and take steps to solve some of the now unsolved managerial problems.

The question is: are you to get in step with the necessities of the hour, or do you intend to force your board to get a superintendent who will do the necessary things? We have been preaching this for years. Many superintendents have seen the signs and have read and interpreted them. But there are undoubtedly many incompetent people at the head of our hospitals, and they are going to be eliminated.

### Humidity and Ventilation

When you walk through a ward and find your heart patients panting like a fish out of water, you had better look over the ventilation. Heart patients do not do well in too dry an atmosphere and their breathing becomes greatly labored.

And if you find that in the lung wards the patients are having trouble breathing you had better see if your humidity is too high. Tuberculosis and pneumonia do not do well in moist atmosphere.

In other words, it is the duty of the hospital superintendent to study the needs of various classes of patients in regard to ventilation, and to meet these needs. For study and checking purposes there should be a hygrometer in every acute disease ward, and with such an instrument, the studious and ambitious superintendent will find so much of interest and profit, from the standpoint of the patients' welfare that he will be able to make a very definite contribution to the work of the doctors.

### Young Women for Training Schools

The stimulus of the war, the demands of the war for qualified nurses, and the patriotic anxiety of women to serve their country are working definitely towards a vastly increased amount of good material for training schools. Within the past three or four months it has come to pass that hospitals which had had great difficulty in obtaining probationers in the past have had no trouble on this score. Young women have been flocking into the training schools by thousands. Many hospitals have not had their share. There are generally reasons for this discrimination. We know doctors who will not recommend their own hospitals to the young women in the families for which they practice. This is an indictment against the hospital.

Any hospital having trouble about securing pupil nurses at this time had better take up the problem with its medical men and find out what is wrong. If the doctors cannot recommend the hospital to young women of their acquaintance, they ought to tell the superintendent of the hospital so, with the utmost frankness, and they ought to tell him why, and the superintendent, on his part should see to it that these reasons are adjusted.

Several thousand dollars will be expended in the near future in remodeling the Woman's Hospital at Nashville, Tenn.



# INDEX TO THE MODERN HOSPITAL

Volume IX, July to December, Inclusive, 1917

This index contains in a single alphabetical sequence the names of authors and subjects of all articles published in THE MODERN HOSPITAL during the six months covered by this volume. The following abbreviations indicate special departments in which articles appeared: Ab., abstract in Current Hospital Literature; Bk. Rev., Book Reviews; Corr., Letters to the Editor or Foreign Correspondence; Ed., Editorial; Hint, Hints for Hospital Superintendents; Q. and A., Queries and Answers.

## A

Abbott, Helen—Tuberculosis Department of San Francisco Hospital From the Dietitian's Point of View.....	447
Accounting, Report of Committee on—Warner, Greene and McEachern .....	355
Addison County Hospital, Middlebury, Vt.—Walker.....	240
Administration, Hospital, Divided Authority in (Ed.).....	186
Administrative Articles (see also Standardization of Hospitals)—	
Accounting, Report of Committee on—Warner, Greene and McEachern .....	355
Blanket Problem, Sanatorium—Rockwood.....	98
Boston Dispensary in Its One Hundred and Twentieth Year.....	303
Buyer for the Hospital—Reid.....	128
Buying Problem in War Time (Ed.).....	188
Clinical Laboratory of Albany Hospital—Graham.....	158
Dietary, Correct, Responsibility of Superintendent for—Blanchfield .....	373
Dietitian, Scope of Duties of—Cooper.....	139
Dispensary, Function of—Ransom.....	223
Economics, Institutional, for War Time.....	20
Economy, Problem in (Corr.).....	230
Eye Clinics, Children's, New York—Carhart.....	171
Food Boxes, Heated, of Philadelphia General Hospital—Wallace.....	301
Food Conservation, Methods of.....	217
Food Truck, Electrically Heated, of Massachusetts General Hospital—Howland .....	301
Food, Waste of, Printed Forms to Prevent—Summersgill (Corr.).....	380
Gauze and Cotton, Used, Reclaiming—Test.....	22
Hospital Problem of Today—What is it?—Hornsby.....	322
Hospitals and Workmen's Compensation—Howell and Buckley.....	234
Jewish Home for Chronic Invalids of St. Louis—Kaplan and Simon .....	459
Laundry Work, Better—Warner (Corr.).....	135
Married Institutional Physicians, Plea for—Scheffel (Corr.).....	230
Morbidity Statistics, Hospital, Standardization of.....	183
Nursing, Records of Schools of—Bell.....	34
Oil as Fuel in Institutions—Peters.....	328
Operating Room, White—Secor.....	170
Preventive Medicine, Department of in Children's Hospital—Dorwarth (Ab.).....	291
Public Health Work of Children's Hospital—Dorwarth.....	242
Publicity, Hospital, as Means of Education and Support—Greene.....	336
Small-Town Hospital—Some of the Bases of Its Success—Phifer.....	412
Social Service Work, Possibilities of, in Eye Hospital or Dispensary—Brannick.....	219
Supplies, Economical Use of, Controlling Basis for—Moss.....	318
Surgery, Artificial Daylight in—Luckiesch.....	311
Surgical Dressings, Economy in Cutting of—McGrath.....	8
Aeroplane, Transportation of Wounded Soldiers by (Ab.)—Blanchard .....	141
Aged, Care of (Discovered—A New People) (Ed.).....	25
Aged, Institutional Care of—Nascher.....	4
Ager, Louis C.—New York American Emergency Hospital for After-care of Infantile Paralysis.....	166
Agricultural Preparedness and State Hospitals (Ed.)—Hurd.....	24
Albany Hospital, Clinical Laboratory of—Graham.....	158
Alberti, A.—Psychiatric Services of the War (Ab.).....	450
Almond Extract—Street.....	17
Almshouse Administration, Standards of—Bardwell.....	393
Ambulance Boats, Conversion of Yachts Into—Eaton.....	81
Ambulance of the American Hospital of Paris as Seen by a Surgeon (Ab.)—Stewart.....	67
Ambulance Ship, First Private Yacht Given for.....	439
Ambulance, Surgical Automobile (Ab.)—Monod.....	141
Ambulances, Motor, Last Word in.....	369
America, Great Hospitals of.....	387
American Ambulance Hospital in Paris.....	349
American College of Surgeons, Meeting of to Standardize Hospitals.....	183, 311, 421
American Fund for French Wounded, Motor Service of, and its "Wonderful Chauffeurs".....	210
American Hospital Association—	
Cleveland Meeting of (Ed.).....	117, 268
Cleveland Meeting, Preliminary Announcements of.....	136, 189
Cleveland Meeting, Report of.....	273
Committee Appointments for 1917-1918.....	437
Executive Offices Move to Washington.....	349
Official Bulletin for June.....	55
Official Bulletin for July.....	137
Official Bulletin for August.....	194
Report of Board of Trustees, 1917.....	285
Report of Secretary—Walsh.....	280
American Hospital Association and "The Modern Hospital," Sir Henry Burdett's Appreciation of.....	206
American Hospital of Paris, Ambulance of, as Seen by a Surgeon—Stewart (Ab.).....	67

American Medical Association, Sixty-Eighth Annual Session of....	59
Amsterdam, New Division for Babies in Emma Children's Hospital in—Schipers (Ab.) .....	377
Anesthesia (Gas-Oxygen-Ether) Apparatus, Connell.....	228
Antituberculosis: see Tuberculosis.	
Architectural Articles—	
Addison County Hospital, Middlebury, Vt.—Walker.....	240
Columbia War Hospital—Wood.....	112
Conversion of Yachts into Ambulance Boats—Eaton.....	81
Contagious Disease Hospital for Immigrants, Ellis Island, N. Y.—Wilson .....	332
Fire, Prevention of in Hospital Buildings—Porter.....	333
French War Hospital System.....	120
Henry W. Putnam Memorial Hospital, Bennington, Vt.—Walker.....	1
Herman Knapp Memorial Eye Hospital, New York City—Knapp.....	153
James J. Gray Clinic in Atlanta, Ga.—Hinton and Hentz.....	177
Jasper County (Mo.) Tuberculosis Hospital—Cummings.....	406
Massachusetts General Hospital, Private Ward of—Howland.....	389
New York American Emergency Hospital for After-Care of Poliomyelitis—Ager .....	166
Queen Alexandra's Hospital for Officers.....	122
Rockefeller Institute War Demonstration Hospital—Butler.....	73
Architecture, Hospital, and New Trustee.....	231
Architecture, Hospital, and Sunlight—van Walsen (Ab.).....	376
Armour, J. Ogden, on Truth About Price of Meat.....	448
Army Hospitals: see Military Hospitals.	
Army, Reclamation of Rejected Candidate for—Quayle.....	415
Army Service, Hospital Treatment for Remediable Disqualifications for (Ed.).....	27
Army, Social Hygiene in During War Time—Foster.....	65
Army, H. V.—Medicine and Metrics.....	174
Asepto Syringe.....	382
Atomizer, Paraffine, Electrically Heated.....	309
Austin, S. H.—Needs and Welfare of Blind.....	202
Autocrat, Benevolent.....	231

## B

Babies; see also Infants.	
Babies' Dispensary and Hospital, Cleveland.....	199
Baby Camp, Bethany Hospital.....	33
Baby Dressing Table, Folding.....	385
Bacon, Asa S.—Food Economies in the Presbyterian Hospital, Chicago.....	21
Bacteriology, Teaching of in Schools for Nurses—Pfefferkorn.....	362
Baer, Joseph L.—Relation of the Nurses' Training to the Great War .....	129
Bandage Roller, Electric, Hoffman Blue Cross.....	384
Bardwell, Francis—Standards of Almshouse Administration.....	393
Barlow Sanatorium, Economy at—Klotz (Corr.).....	453
Barrack Hospital, Large, Arrangement and Management of During the War—Steffelaar (Ab.).....	449
Barrack-Tent (Patented) With a Dismountable Floor of the Mobile Surgical Ambulance of Army.....	385
Basic Quantity Food Tables to be Used in Determining the Daily Issue of Food to Kitchen (Bk. Rev.).....	308
Bathing Facilities for Soldiers at the Front.....	209
Beard, Mary—The Family as the Unit of Public Health Work.....	247
A Correction (Corr.).....	454
Bed Carrier.....	383
Bedroom, Window of—van Walsen (Ab.).....	226
Bell, Alice F.—Records of Schools of Nursing.....	34
Bennett, Estelle—Hospital Cars for the Canadian Government.....	32
Bergeggi, First Climatic Military Institute of Red Cross Opened at (Ab.).....	67
Bethany Hospital Baby Camp.....	33
Biassono, Opening of First Tuberculosis Sanatorium at (Ab.).....	226
Bigami, L.—Protection of the Poor Insane (Ab.).....	142
Biological Laboratory, State, Branch of, at Local Hospital.....	246
Blachly, Arthur T.—Apparatus for Writing With the Knee (Ab.).....	226
Blanchard, R.—Transportation of Wounded Soldiers by Aeroplane (Ab.).....	141
Blanchfield, Florence A.—Responsibility of Superintendent for Correct Dietary.....	373
Blanket Problem, Sanatorium—Rockwood.....	98
Blind, Chicago Light House for—Williams.....	203
Blind, Needs and Welfare of—Austin.....	202
Blind, Vocational Work for, in Massachusetts—Wright.....	201
Blind, What Illinois is Doing for—Comstock.....	80
Blindness, Prevention of in Pennsylvania.....	220
Book Reviews and Books Received for Review 70, 145, 227, 308, 371, 386	
Boston Dispensary in Its One Hundredth and Twentieth Year—Davis .....	303
Boston, Instructive District Nursing Association of—Beard.....	247
Bott, Edward A.—Educational Work for Soldiers.....	293, 365
Braisted, William C.—Emergency Hospital Construction for the U. S. Navy.....	87

- Brannick, Catherine—Possibilities of Social Service Work in an Eye Hospital or Dispensary.....219  
 Brazil, Heliotherapy in, First Attempts at—Filho (Ab.).....376  
 Briggs, L. Vernon—Study of the Problem of the So-Called Defective Delinquent and What Has Been done in Massachusetts (Ab.).....225  
 British Military Medical Arrangements.....294, 368, 444  
 British Naval Medical Service, Land Transportation in.....357  
 British War Hospitals, Economy in.....397  
 Brocq, L.—Plan to Create Syphilis Dispensaries in Paris (Ab.).....376  
 Brown, John Young—Hospital Organization and Efficiency.....428  
 Buckley, Katharine, and Howell, Thomas—Hospitals and Workmen's Compensation.....234  
 Buffalo, Health Centers of City of.....436  
 Bullet Detector, Electric.....309  
 Burdick Heat Applicators.....384  
 Burke Foundation, Food Economics at—Wright.....20  
 Burlington County (N. J.) Colony for the Feeble-Minded.....30  
 Burns, Dressing for (Parresine), and Method of Its Scientific Application.....147  
 Butler, Charles—Rockefeller Institute War Demonstration Hospital.....73  
 Buttermilk and Milk Cooler.....309  
 Buying in War Time (Hint).....462  
 Buying Problem in War Time (Ed.).....188

## C

- Cacace, E.—First Spanish Institute for the Protection of Infants, and Its Program (Ab.).....69  
 Cafeteria Service for Tuberculosis Patients—Chadwick and Smith.....403  
 California Sanatorium, Economical Features of—Klotz (Corr.).....453  
 Camel Transport for the Wounded.....213  
 Cameron, Reba G.—How a State Hospital Helps Uncle Sam.....370  
 Camps to be Made Hospitals.....296  
 Camus, J. and Riche, O.—Special Center for the Examination and Complementary Treatment of Discharged Wounded Soldiers (Ab.).....141  
 Canada, Country Hospitals for.....312  
 Canadian Government, Hospital Cars for—Bennett.....32  
 Canadian Soldiers, Wounded, Rehabilitation of.....212, 292, 365  
 Canning in the Hospital (Hint).....151  
 Canton Medical Missionary Union (Ab.).....449  
 Cantonment Hospitals.....296  
 Cardiac Clinics—Ferguson (Ab.).....143  
 Carhart, William Merle D'Aubigne—New York Children's Eye Clinics.....171  
 "Carit" Tuberculosis Sanatorium (Ab.).....376  
 Carrel Hospital at Compiegne, and Treatment of War Wounds—Cherubini (Ab.).....450  
 Cars, Hospital: see also Train, Hospital.  
 Cars, Hospital, for the Canadian Government—Bennett.....32  
 Carving, Dainty, Skillful, as a Hospital Economy (Hint).....151  
 Case Records in Hospitals, Value of—Codman.....426  
 Catania, University of, Neuropathological Division for Soldiers—D'Abundo (Ab.).....68  
 Causes of Tuberculosis—Cobbett (Bk. Rev.).....386  
 Celery Extract—Street.....17  
 Chadwick, Henry D., and Smith, Herbert W.—Cafeteria Service for Tuberculosis Patients.....403  
 Chapin, Henry Dwight—Systematized Boarding out Versus Institutional Care for Infants and Young Children (Ab.).....377  
 Chapman, Frank E.—Welcome to Cleveland.....196  
 Cherubini, L.—Carrel Hospital at Compiegne and Treatment of War Wounds (Ab.).....450  
 Chicago Light House for the Blind—Williams.....203  
 Chicago to have Reconstruction Hospital.....296  
 Children, Mentally Deficient, Their Treatment and Training—Shuttleworth (Bk. Rev.).....145  
 Children, Out-Patient Work With, Suggested Improvement for—McLean (Ab.).....450  
 Children's Eye Clinics, New York—Carhart.....171  
 Children's Hospital, Department of Preventive Medicine in—Dorwarth (Ab.).....291  
 Children's Hospital, First, in Norway (Ab.).....141  
 Children's Hospital of Philadelphia, Public Health Work of—Dorwarth.....242  
 Children's Hospitals: see also Foundling Hospitals.  
 China, Hospital Standardization in.....460  
 China, Men Nurses in.....23  
 Chinese, Kuling Tuberculosis Sanatorium for (Ab.).....377  
 Chinese of American Church Mission, Shanghai, St. Luke's Hospital for (Ab.).....142  
 Chloramine-T Paste in Treatment of Wounds (Ab.).....227  
 Christian, Henry A.—Modern Hospital—Its Form, Function, and Work (Ab.).....143  
 Cincinnati's Successful Antituberculosis Campaign—Dinwiddie.....400  
 Cinnamon Extract—Street.....17  
 City Hospitals: see Municipal Hospitals.  
 Civilian Hospital, Reorganization of on War Basis—Smith.....262  
 Cleveland, American Hospital Association Meeting in: see American Hospital Association.  
 Cleveland, Dietitians Meet in.....446  
 Cleveland Foundation.....196  
 Cleveland Hospital Council.....196  
 Cleveland, Hospitals of.....196  
 Cleveland State Hospital.....200  
 Climatic Military Institute of the Red Cross, First, Opened at Bergamo (Ab.).....67  
 Clinical Laboratory of Albany Hospital—Graham.....158  
 Clinics and Visiting Nursing—Haag.....356  
 Clove Extract—Street.....17  
 Cobbett, Louise—Causes of Tuberculosis (Bk. Rev.).....386  
 Codman, E. A.—Value of Case Records in Hospitals.....426  
 Cohn, Eugene—Guiding Principles in Institutional Life.....460  
 College-Trained Woman and the National Crisis.....31  
 Colorado Fuel and Iron Company Retirement Plan.....222  
 Colored Pupil Nurses (Q. and A.).....72  
 Colored Pupil Nurses—Richardson (Corr.).....230  
 Columbia War Hospital—Wood.....112  
 Compiegne, Carrel Hospital at, and Treatment of War Wounds—Cherubini (Ab.).....450

- Compresses: see Surgical Dressings.  
 Comstock, Charles E.—What the State of Illinois is Doing for Its Blind.....80  
 Connell Gas-Oxygen-Ether Apparatus.....228  
 Connecticut Association of Dietitians Meets.....449  
 Construction, Hospital, Today (Q. and A.).....379  
 Contagious Disease Hospital for Immigrants at Ellis Island, N. Y.—Wilson.....314  
 Cooley Farms, Cleveland.....200  
 Cooper, Lenna Frances—How the Dietitian Can Help You.....139  
 Copenhagen, Denmark, Pioneer Institution in for Reconstructing the Cripple—Monrad (Ab.).....450  
 Costs, Hospital: see Accounting.  
 Cotton and Gauze, Used, Reclaiming—Test.....22  
 County Hospitals: see also Tuberculosis Sanatoriums.  
 Addison County Hospital, Middlebury, Vt.—Walker.....240  
 Courtesy in Front Office (Hint).....462  
 Cozzolino, Signora—Urgent Need of Establishing Heliotherapeutic Institutes and Stations for Ambulatory Treatment of Osseous, Glandular, and Incipient Pulmonary Tuberculosis (Ab.).....450  
 Cripple, Reconstructing; Pioneer Institution in Copenhagen, Denmark—Monard (Ab.).....450  
 Crippled Soldiers, Vocational Reeducation of.....124  
 Cripples in Industry, Placing—Rigby.....417  
 Crutch, Adjustable.....228  
 Cummings, Ruth K.—Well-Planned County Tuberculosis Hospital.....406  
 Current Hospital Literature.....27, 141, 224, 376, 449

## D

- D'Abundo—Neuropathological Division for Soldiers of the Clinic for Nervous and Mental Diseases of the University of Catania (Ab.).....68  
 Dakin, H. D., and Dunham, E. K.—Halazone for the Sterilization of Water (Ab.).....227  
 Davis, Michael M.—Boston Dispensary in Its One Hundred and Twentieth Year.....303  
 Dispensary as a Factor in Public Health Work (Ed.).....268  
 Dawson, William J. G.—Sonoma State Home for Feeble-Minded and Epileptics.....14  
 DeSouza, O.—Hotel Sanatoriums and Tuberculosis Sanatoriums for Patients in Region of Itatiaia (Ab.).....376  
 Defective Delinquent, So-Called, Study of Problem of, and What Has Been Done in Massachusetts—Briggs (Ab.).....225  
 Dental X-Ray Film Holder—Dorr.....71  
 Diagnostic Clinic, San Diego—Pollock.....251  
 Diet Kitchen, Equipping.....89  
 Diet Kitchens of Tuberculosis Department of San Francisco Hospital—Abbott.....447  
 Dietary, Correct, Responsibility of Superintendent for—Blanchfield.....373  
 Dietetics, Department of.....60, 139, 217, 300, 373, 446  
 Dietitian, Scope of Duties of—Cooper.....139  
 Dietitians, Conference of.....300  
 Dietitians, Connecticut Association of, Meets.....449  
 Dietitians Meet at Cleveland.....446  
 Dining Rooms, Children's (Q. and A.).....379  
 Dinwiddie, Courtenay—Cincinnati's Successful Antituberculosis Campaign.....400  
 Disabled Soldiers, Future of.....124  
 Dispensary and Out-Patient Work.....223, 303  
 Dispensary as Factor in Public Health Work—Davis (Ed.).....268  
 Dispensary, Boston, in Its One Hundred and Twentieth Year—Davis.....303  
 Dispensary, Function of—Ransom.....223  
 Dispensary, Volunteer Workers in.....144  
 Dori, L.—Hospital Care in the Province of Pavia (Ab.).....226  
 Dorr Dental X-Ray Film Holder.....71  
 Dorwarth, Charles V.—The Public Health Work of a Children's Hospital.....242  
 Dressing Table, Baby, Folding.....385  
 Dressings: see Surgical Dressings.  
 Dumarest, F., and Vigne, A.—Work Cure in a People's Sanatorium (Ab.).....142  
 Dunham, E. K., and Dakin, H. D.—Halazone for the Sterilization of Water (Ab.).....227  
 Dunott, D. Z.—Maryland State Hospital Train.....101

## E

- Earnings, Investment of (Hint).....151  
 Eaton, W. E.—Conversion of Yachts into Ambulance Boats.....81  
 Economics, Institutional, for War Time.....20  
 Economics, War-Time.....130  
 Economy, Another Problem in.....230  
 Economy, Methods to Insure (Ed.).....353  
 Editorials.....25, 116, 184, 268, 350, 418  
 Educating a Community (Q. and A.).....379  
 Electric Light Switch (Q. and A.).....72  
 Ellis Island, N. Y., Contagious Disease Hospital for Immigrants at—Wilson.....314  
 Emma Children's Hospital in Amsterdam, New Division for Babies in—Schipers (Ab.).....377  
 Emory University, James J. Gray Clinic of—Hinton and Hentz.....177  
 English Hospitals, Americanizing (Ed.).....118  
 English-Italian Phrase Book for Social Workers—Waller (Bk. Rev.).....308  
 Epileptics and Feeble-Minded, Sonoma State Home for—Dawson.....14  
 Epileptics, Industrial Training for at Monson State Hospital—Flood.....33  
 Epileptics, Institutional Care of—Shanahan.....10  
 Equipment, Hospital, and Surgical Instruments, Scarcity of—Mueller.....90  
 Eugenics, Father of—Mendel.....207  
 Extracts, Flavoring: see Flavoring Extracts.  
 Eye Clinic, Prison—Farley (Ab.).....224  
 Eye Hospitals and Dispensaries—Government's Work in Eradication of Trachoma—McMullen.....163  
 Herman Knapp Memorial Eye Hospital, New York City—Knapp.....163  
 New York Children's Eye Clinics—Carhart.....171  
 Eye Hospital or Dispensary, Possibilities of Social Service Work in—Brannick.....219

## F

- Fabella, J., and Hernandez, A.—Treatment of Pulmonary Tuberculosis in the San Juan del Monte Sanatorium (Ab.).....141



# INDEX

III

- Family as Unit of Public Health Work—Beard.....247  
 A Correction—Beard (Corr.).....454  
 Farley, Frederika—Prison Eye Clinic (Ab.).....224  
 Feeble-Minded: see also Morons.  
 Feeble-Minded and Epileptics, Sonoma State Home for—Dawson... 14  
 Feeble-Minded in Court .....56  
 Feeble-Minded in Industry—Rossy .....204  
 Feeble-Minded, Industrial Training for.....358  
 Feeble-Minded, New Jersey, Colonies for.....30  
 Feeble-Minded, New York State, Colonies for.....28  
 Feeble-Minded, New York, Institutional Care for.....23  
 Feeble-Minded, State Care for—Murdoch.....12  
 Ferguson, J. S.—Cardiac Clinics (Ab.).....143  
 Fesevur, H. J.—Plan of Pavilion for Infectious Diseases for Town  
 of About 30,000 Inhabitants (Ab.).....450  
 Field Hospital Presented to the Russian Army by France (Ab.).....68  
 Fighting, Actual, Preparedness for (Ed.).....271  
 Filho, A. Moncorvo—First Attempts at Heliotherapy in Brazil (Ab.).....376  
 Fiorani, P. L.—Management of Hospital Trains (Ab.).....67  
 Fire, Prevention of, in Hospital Buildings—Porter.....333  
 Flamini, M.—Reform of Foundling Hospitals (Ab.).....377  
 Flavoring Extracts, Their Character and Composition—Street.....15  
 Flood, Everett—Industrial Training for Epileptics.....33  
 Flower Hospital—No-Waste Bulletin.....130  
 Food Boxes, Heated, of Philadelphia General Hospital—Wallace.....301  
 Food, Conservation of: see also under Economy.  
 Food, Conservation of—Wesener and Teller.....60, 140, 218, 300, 374  
 Food Debris, Sterilization of in Isolation Hospital—Matteson (Corr.).....454  
 Food Production on State Hospital Farms (Ed.)—Hurd.....24  
 Food Tables, Basic Quantity, to be Used in Determining Daily Issue  
 of Food to Kitchen (Bk. Rev.).....308  
 Food Truck, Electrically Heated, of Massachusetts General Hospi-  
 tal—Howland .....301  
 Food, Waste of, Printed Form to Prevent—Summersgill (Corr.).....380  
 Foster, J. H.—Social Hygiene in the Army During War Time.....65  
 Foundling Hospitals, Reform of—Flamini (Ab.).....377  
 Fox, Elizabeth G.—1917 Annual Meeting of National Organization  
 for Public Health Nursing.....132  
 Fractures of Legs, Splints for.....71  
 France, Military Hospitals in, Controlled by Women.....332  
 Frazer, B. F.—Industrial Occupation and Recreation Among the  
 Insane (Ab.).....69  
 French-English Military Medical Glossary—Plumon (Bk. Rev.).....70  
 French Military Hospital Ships.....317  
 French War Hospital System.....120  
 Fuel, Oil as, in Institutions—Peters.....328  
 Fumigato, A. Permanganate of Potash Substitute for Fumigation.....457
- G**
- Gas-Oxygen-Ether Apparatus, Connell.....228  
 Gasoline for Cleansing Wounds—Morton.....231  
 Gassette, Grace, War Orthopedic Work of—Lester.....92  
 Gauze: see also Surgical Dressings.  
 Gauze and Cotton, Reclaiming of—Test.....22  
 General Hospital and Syphilis.....266  
 Genito-Urinary Table .....149  
 Geyser Electric Water Heater.....150  
 Gibney, Virgil P.—War Economies in Surgical Supplies.....21  
 Ginger Extract—Street .....17  
 Goldwater, S. S., and Walker, Harry Leslie—Henry W. Putnam Mem-  
 orial Hospital, Bennington, Vt.....1  
 Goodrich, Annie W.—Trained Nurse.....431  
 Graham, Clarence F.—Clinical Laboratory of Albany Hospital.....158  
 Grape Juice, Lime Juice, and Loganberry Juice—Street.....96  
 Greene, Frederick D.—Hospital Publicity as Means of Education and  
 Support .....336  
 Greene, Frederick D., Warner, A. R., and McEachern, Malcolm T.—  
 Report of Committee on Accounting.....355  
 Guy's Hospital School of Massage.....122  
 Gynecological Clinic of University of Munich, New (Ab.).....143
- H**
- Haag, Mary Elizabeth—Clinics and Visiting Nursing.....356  
 Hadden, G.—Registration of Out-Patients (Ab.).....377  
 Haemacytometer, Thoma—Levy.....457  
 Halazone for Sterilization of Water—Dakin, H. D., and Dunham,  
 E. K. (Ab.).....227  
 Handicapped, Occupations for: see Blind; Crippled; Feeble-Minded;  
 Insane; Soldiers.  
 Health Centers of City of Buffalo.....436  
 Heat Applicators, Burdick.....384  
 Heater, Hotpoint Hedlite .....457  
 Heliotherapeutic Institutes and Stations for Ambulatory Treatment  
 of Osseous, Glandular, and Incipient Pulmonary Tuberculosis,  
 Urgent Need of Establishing—Cazzolino (Ab.).....450  
 Heliotherapy in Brazil, First Attempt at—Filho (Ab.).....376  
 Heliotherapy in Treatment of War Wounds—Magrassi (Ab.).....377  
 Henry W. Putnam Memorial Hospital, Bennington, Vt.—Walker and  
 Goldwater .....1  
 Hentz, H. F., and Hinton, C. C.—James J. Gray Clinic in Atlanta, Ga.177  
 Herman Knapp Memorial Eye Hospital, New York City—Knapp.....153  
 Hernandez, A., and Fabela, J.—Treatment of Pulmonary Tubercu-  
 losis in the San Juan del Monte Sanatorium (Ab.).....141  
 Hill, G. H.—Origin of the Psychopathic Hospital (Ab.).....68  
 Hinton, C. C., and Hentz, H. F.—James J. Gray Clinic in Atlanta,  
 Ga. ....177  
 Hints for Hospital Superintendents.....151, 231, 462  
 Hoffman Blue Cross Electric Bandage Roller.....384  
 Hospital, No. 32 Bis. (Hospital Francaise de New York, Passy par  
 Vernon (Yonne, France.)—Nodine (Ab.).....141  
 Hornsby, John Allan—Hospital Organization Under the War De-  
 partment .....88  
 Hornsby, John A.—Hospital Problem of Today—What Is It?.....322  
 Hornsby, John A., and Others—Standardization of Hospitals—  
 Class I, The University or Teaching Hospital.....18, 103  
 Classes II and III, Semipublic Institutions.....180  
 Class IV, Small Semipublic Hospitals.....253  
 Class V, Small Semipublic Community Hospitals.....341  
 Class VI, Large Municipal Hospitals.....409  
 Hospital Association, Ohio State, Third Annual Meeting of.....57  
 Hospital Buildings, Non-Fireproof, Reducing Hazard to Life in—  
 Porter .....333  
 Hospital, Buyer for—Reid.....128  
 Hospital Buying (Ed.) .....119  
 Hospital Buying, War-Time Foresight in (Ed.).....24  
 Hospital Care in Province of Pavia—Dori (Ab.).....226  
 Hospital Cars: see Cars, Hospital; Train, Hospital.  
 Hospital, Civilian, Reorganization of on War Basis—Smith.....262  
 Hospital Construction: see Architecture, Hospital; Construction,  
 Hospital.  
 Hospital Construction, Emergency, for U. S. Navy—Braisted.....87  
 Hospital Costs: see Accounting.  
 Hospital, Educational Responsibility of, to Profession and Commu-  
 nity—Kanavel .....430  
 Hospital Finances and the War (Ed.).....350  
 Hospital Floors: see Floors, Hospital.  
 Hospital, Medical, and Special Meetings.....60  
 Hospital, Meeting War Stringency in (Ed.).....25  
 Hospital Needs of Small Community (Ed.).....352  
 Hospital, Modern—Its Form, Function, and Work—Christian (Ab.).....143  
 Hospital Organization—Murphy (Ab.).....224  
 Hospital Organization and Efficiency—Brown.....428  
 Hospital Organization Under the War Department—Hornsby.....88  
 Hospital Plans, Cut-and-Dried (Q. and A.).....146  
 Hospital Problem of Today—What Is It?—Hornsby.....322  
 Hospital Problems—Littig (Ab.).....225  
 Hospital Service Flag—Young (Corr.).....453  
 Hospital Ships: see also Ambulance Boats.  
 Hospital Ships, French Military.....317  
 Hospital, Small-Town, Some of Bases of Its Success—Phifer.....412  
 Hospital Social Service: see Social Service, Hospital.  
 Hospital Supplies: see Supplies.  
 Hospital Trains: see Cars, Hospital; Train, Hospital.  
 Hospital Without Staff, Plea for—O'Connor (Corr.).....454  
 Hospitals: see also Cantonment Hospitals; Children's Hospitals;  
 Epileptic, Feeble-Minded, and Insane, Institutions for; Field  
 Hospitals; Foundling Hospitals; Hut Hospitals; Military Hos-  
 pitals; Orthopedic Hospitals; Psychopathic Hospitals; Recon-  
 struction Hospitals; State Hospitals.  
 Hospitals, American, Federal Inspection and Control of—Wilson.....233  
 Hospitals and Workmen's Compensation—Howell and Buckley.....234  
 Hospitals, Country, for Canada.....312  
 Hospitals, Individual, Descriptions of (with Plans)—  
 Addison County Hospital, Middlebury, Vt.—Walker.....240  
 Columbia War Hospital—Wood.....112  
 Contagious Disease Hospital for Immigrants, Ellis Island, N. Y.—  
 Wilson .....314  
 Henry W. Putnam Memorial Hospital, Bennington, Vt.—Walker  
 and Goldwater .....1  
 Herman Knapp Memorial Eye Hospital, New York—Knapp.....153  
 Industrial Hospital of Northern Pacific Beneficial Association—  
 Smith .....244  
 Jasper County (Mo.) Tuberculosis Hospital—Cummings.....406  
 Massachusetts General Hospital, Private Ward of—Howland.....389  
 New York American Emergency Hospital for the After-Care of  
 Poliomyelitis—Ager .....166  
 Rockefeller Institute War Demonstration Hospital—Butler.....73  
 Hospitals, Need for Enlargement of (Ed.).....187  
 Hospitals of Rome, Plan for Systematization of Buildings of (Ab.).....376  
 Hospitals of the South (Ed.).....419  
 Hospitals, Open-Door (Ed.).....418  
 Hospitals, Service Flags for (Ed.).....420  
 Hospitals, Standardization of: see Standardization of Hospitals.  
 Hospitals, Value of Case Records in—Codman.....426  
 Hotel Sanatoriums and Tuberculosis Sanatoriums in Region of  
 Itatiaia—Souza (Ab.) .....376  
 Hotpoint Hedlite Heater .....457  
 Howell, Thomas, and Buckley, Katherine—Hospitals and Workmen's  
 Compensation .....234  
 Howland, Joseph B.—Massachusetts General Hospital Electrically  
 Heated Food Truck .....301  
 Private Ward of Massachusetts General Hospital.....389  
 Humidity and Ventilation (Hint).....462  
 Hurd, Henry M.—State Hospitals and Agricultural Preparedness  
 (Ed.) .....24  
 Huron Road Hospital, Cleveland.....199  
 Hut Hospital .....131  
 Hygeia Nursing Bottle .....382  
 Hygiene, Social: see Social Hygiene.
- I**
- Illinois, What the State Is Doing for Its Blind—Comstock.....80  
 Indherred Hospital in Northern Trondhjem District, New Building  
 of—Tandberg (Ab.) .....226  
 Industrial Hospital Plan of Northeastern Hospital of Philadelphia—  
 Lyons .....306  
 Industrial Hospital of Northern Pacific Beneficial Association—  
 Smith .....244  
 Industrial Welfare.....62, 221, 306  
 Industry, Feeble-Minded in—Rossy .....204  
 Infants and Young Children, Systematized Boarding Out Versus  
 Institutional Care for—Chapin (Ab.).....377  
 Infants, First Spanish Institute for Protection of—Cacace (Ab.).....69  
 Infants, Institutional Care of—Brady (Ab.).....299  
 Infants, New Division for, in Emma Children's Hospital in Am-  
 sterdam—Schippers (Ab.) .....377  
 Infectious Diseases, Plan of Pavilion for, for Town of About 30,000  
 Inhabitants—Fesevur (Ab.) .....450  
 Insane, Care and Treatment of in County Institutions of Pennsyl-  
 vania—Sandy (Ab.) .....378  
 Insane, Hospital for, Community Value of Out-Patient Department  
 of—MacDonald (Ab.) .....69  
 Insane in County Poor Farm—Salmon (Ab.).....69  
 Insane in Japan, Care of—Isida (Ab.).....376  
 Insane, Industrial Occupation and Recreation Among—Frazer (Ab.) 69  
 Insane, Institutionalized .....232  
 Insane, Modern Hospital for from Standpoint of Medical Service—  
 Singer (Ab.) .....69  
 Insane Poor, Protection of—Bignami (Ab.) .....142

- Inspection and Control, Federal, of American Hospitals—Wilson...233  
 Institutional Life, Guiding Principles in—Cohn...460  
 Institutional Physicians, Married, Plea for—Scheffel (Corr.)...230  
 Institutions, Descriptions of: see Hospitals, Individual, Descriptions of; also under Epileptic; Feeble-Minded; Insane.  
 Institutions, Recent Ohio Legislation on—Wright...22  
 Instructive District Nursing Association of Boston—Beard...247  
 Interns and Medical Students, Danger in Drafting...232  
 Interns, Government's Policy Toward, Discussion of at American Hospital Association Meeting (Ed.)...184  
 Ishida, N.—Care of Insane in Japan (Ab.)...376  
 Isko Refrigerating Unit...456  
 Isolation Hospital, Sterilization of Food Debris in—Matteson (Corr.)...454  
 Italian (English-Italian) Phrase Book for Social Workers—Waller (Bk. Rev.)...308
- J**
- James J. Gray Clinic in Atlanta, Ga.—Hinton and Hentz...177  
 Jamme, Anna C.—Administrative and Legislative Problems in Meeting Modern Demands on the Graduate Nurse...214  
 Japan, Care of Insane in—Ishida (Ab.)...376  
 Jasper County (Mo.) Tuberculosis Hospital—Cummings...406  
 Jewish Home for Chronic Invalids of St. Louis—Kaplan and Simon...459
- K**
- Kanavel, Allen B.—Educational Responsibility of Hospital to Profession and Community...429  
 Kankakee State Hospital, Official Creed of—Cohn...460  
 Kansas, Hospitals of, and Kansas Hospital Association—Murdoch (Ab.)...225  
 Kaplan, Elizabeth S., and Simon, Selig—Jewish Home for Chronic Invalids of St. Louis...459  
 Kirkwood, Frances—Following a Vision of Better Men and Women...221  
 Kitchen Machine, New...147  
 Klotz, Walter C.—Economic Features of California Sanatorium (Corr.)...453  
 Knapp, Arnold—Herman Knapp Memorial Eye Hospital, New York City...153  
 Kuling Tuberculosis Sanatorium for Chinese (Ab.)...377
- L**
- Labor Turnover in Hospitals (Ed.)...187  
 Laboratory, Clinical, of Albany Hospital—Graham...158  
 Lakeside Hospital, Cleveland...198  
 Lapham, Mary E.—More Knowledge Instead of More Sanatoriums (Corr.)...452  
 Laundry Work, Better—Warner (Corr.)...135  
 Laxative Food Preparations and Their Composition—Street...398  
 Lemon Extract—Street...16  
 Lester, Fanny B.—Grace Gassette's Work in War Orthopedics...92  
 Letters to the Editor...135, 230, 380, 452  
 Letts, W. M.—Screens (Verse)...461  
 Light and Its Effect on Health...152  
 Light Treatment, Quartz, Experiences with—Sokolow (Ab.)...449  
 Lime Juice, Loganberry Juice, and Grape Juice—Street...96  
 Littig, Lawrence W.—Some Hospital Problems (Ab.)...225  
 Loganberry Juice, Grape Juice, and Lime Juice—Street...96  
 Luckiesch, M.—Artificial Daylight in Surgery...311  
 Lyons, Barrow B.—Industrial Hospital Plan of Northeastern Hospital of Philadelphia...306
- M**
- MacCarthy, Jessie Howell—Where Garments and Americans are Made (Bk. Rev.)...145  
 McCracken, Elizabeth—Effect of the War on Nursing Situation Abroad...439  
 Public Health Nursing and the Public...297  
 MacDonald, John B.—Community Value of the Out-Patient Department of the Hospital for the Insane (Ab.)...69  
 McDowell, J. R.—Coordination of Tuberculosis Activities in Ohio (Ab.)...450  
 McEachern, Malcolm T., Greene, Frederick D., and Warner, A. R.—Report of Committee on Accounting...355  
 McGrath, Catherine C.—Economy in the Cutting of Surgical Dressings...8  
 McLean, Stafford—Suggested Improvement for Out-Patient Work with Children (Ab.)...450  
 McMullen, John—Government's Work in the Eradication of Trachoma...163  
 Magrassi—Heliotherapy in Treatment of War Wounds (Ab.)...377  
 Marvel, E.—Surgeon's Responsibility to the Economics of the Hospital (Ab.)...68  
 Maryland State Hospital Train—Dunott...101  
 Massachusetts, Blind in, Vocational Work for...201  
 Massachusetts General Hospital Electrically Heated Food Truck—Howland...301  
 Massachusetts General Hospital, Private Ward of—Howland...389  
 Massachusetts, Problem of So-Called Defective Delinquent in—Briggs (Ab.)...225  
 Massage, War Stimulates Work in...122  
 Matteson, V. A.—Sterilization of Food Debris in Isolation Hospital (Corr.)...454  
 Mc.; see as spelled Mac.  
 Meat, Price of, J. Ogden Armour on Truth About...448  
 Mechanical Forces, Organization of (Hint)...462  
 Medical Men in the War (Ed.)...419  
 Medical Students and Interns, Danger in Drafting...232  
 Men as Nurses: see Nurses, Men.  
 Menancio (N. J.) Colony for the Feeble-Minded...30  
 Mendel's Work on Heredity...207  
 Mental Hygiene, Demand Which It Makes on Graduate Nurse—Taft...133  
 Mental Shock and Neurasthenia, Treatment of...368  
 Mentally Deficient Children, Their Treatment and Training—Shuttleworth (Bk. Rev.)...145  
 Metric System, Advantage of in Prescriptions—Arny...174  
 Military Clinics, Neuropathologic, of University of Catania—D'Abundo (Ab.)...68  
 Military Hospital System, French...120  
 Military Hospital in France Controlled by Women...332  
 Military Hospital, Temporary, Economical Features in Construction of...122  
 Military Hospitals: see also Orthopedic Hospitals; Reconstruction Hospitals.  
 Military (Barrack) Hospital, Arrangement and Management of During the War—Steffelaar (Ab.)...449  
 Military Hospitals, British, Economy in...397  
 Military Hospitals, Employment of Women in, in Place of Soldiers (Ab.)...67  
 Military Hospitals, New, Plans for...208  
 Military Hospitals (with Plans)—  
 Columbia War Hospital—Wood...112  
 French Military Hospital System...120  
 Queen Alexandra's Hospital for Officers...123  
 Rockefeller Institute War Demonstration Hospital—Butler...73  
 Military Orthopedic Hospitals, British...294  
 Milk and Buttermilk Cooler...309  
 Minnesota Sanatorium Association Meeting...95  
 "The Modern Hospital" and American Hospital Association, Sir Henry Burdett's Appreciation of...206  
 Moering Plaster Cutter...382  
 Monod, R.—Surgical Automobile Ambulance (Ab.)...141  
 Monrad, Margaret—Reconstructing the Cripple; Pioneer Institution in Copenhagen, Denmark (Ab.)...450  
 Monson State Hospital, Industrial Training at—Flood...33  
 Montgomery Ward & Co., Social Service Departments of—Kirkwood...221  
 Morbidity Statistics, Hospital, Standardization of...183  
 Morton, I.—Gasoline for Cleansing Wounds (Hint)...231  
 Moron, Institutional Life of—Wilson...9  
 Moss, H. J.—Controlling Basis for Economical Use of Supplies...318  
 Mount Sinai Hospital, Cleveland...196  
 Mueller, Vincenz—Scarcity of Surgical Instruments and Hospital Equipment...90  
 Munich, University of, New Gynecological Clinic of (Ab.)...143  
 Municipal Hospitals—  
 Henry W. Putnam Memorial Hospital, Bennington, Vt.—Walker and Goldwater...8  
 Munition Workers, Conservation of Health of...86  
 Murdoch, J. M.—State Care for the Feeble-Minded...12  
 Murdoch, S.—Hospitals of Kansas and Kansas Hospital Association (Ab.)...225  
 Murphy, F. G.—Hospital Organization (Ab.)...224
- N**
- Nascher, I. L.—Institutional Care of the Aged...4  
 Naval Medical Service, British, Land Transportation in...357  
 Navy Hospital Plans (Ed.)...118  
 Navy, U. S., Emergency Hospital Constructed for—Braisted...87  
 Nephelometry...310  
 Nervous and Mental Diseases Among Soldiers, Clinic of University of Catania for—D'Abundo (Ab.)...68  
 Neurasthenia and Mental Shock, Treatment of...368  
 New Instruments and Equipment...71, 147, 228, 309, 382, 456  
 New York State, Colonization of Social Misfits in...28  
 New Jersey Colonies for the Feeble-Minded...30  
 New York American Emergency Hospital for the After-Care of Poliomyelitis—Ager...166  
 New York Children's Eye Clinics—Carhart...171  
 New York Hospital for Ruptured and Crippled, Economy in Surgical Supplies at—Gibney...21  
 New York, Institutional Care for Feeble-Minded in...23  
 New York State, Tuberculosis Campaign in, and Elsewhere...115  
 New York State, Tuberculosis Hospitals in...162  
 New York Telephone Company, Welfare Work of...62  
 Newton Hospital Helps Meet Demand for More Nurses—Riddle...216  
 Nodine, Alonzo M.—Hospital Francais de New York, Passy par Vernon (Yonne) France (Ab.)...141  
 Northeastern Hospital of Philadelphia, Industrial Plan of—Lyons...306  
 Northern Pacific Beneficial Association, Industrial Hospital of—Smith...244  
 Norway, First Children's Hospital in (Ab.)...141  
 Nose and Throat Specialists, Move to Promote Training of—Wishart (Corr.)...453  
 Nurse, Graduate, Administrative and Legislative Problems in Meeting Modern Demands on—Jamme...214  
 Nurse, Graduate, Demand Which Mental Hygiene Makes Upon—Taft...133  
 Nurse, Trained—Goodrich...431  
 Nurse-Midwife...59  
 Nursery Maids, Hospital-Trained, Demand for (Q. and A.)...451  
 Nurses, Colored Pupil (Q. and A.)...72  
 Nurses, Colored Pupil—Richardson (Corr.)...230  
 Nurses, Increase in Supply of by Small Hospital—Riddle...216  
 Nurses, Men, in China...23  
 Nurses, More Trained, Call for (Ed.)...118  
 Nurses, Official Uniform for (Q. and A.)...452  
 Nurses, Pupil, Saving Steps of...100  
 Nurses, Trained, Movement to Increase Number of...298  
 Nurses, Training College Women for...31  
 Nurses' Training, Relation of to Great War—Baer...129  
 Nursing Bottle, Hygeia...382  
 Nursing Course, Red Cross Home...131  
 Nursing, Department of...34, 132, 214, 297, 362, 439  
 Nursing Resources, Survey of...127  
 Nursing School Records: See Training School Records.  
 Nursing Situation Abroad, Effect of War on—McCracken...439  
 Nursing, War, College-Trained Women for...31
- O**
- Occupation and Recreation, Industrial, Among the Insane—Frazer (Ab.)...69  
 Occupational Experts, Training Course for—Upham...458  
 O'Connor, John J.—Plea for Hospital Without Staff (Corr.)...454  
 Ohio, Coordination of Tuberculosis Activities in—McDowell (Ab.)...450  
 Ohio Council of National Defense, Work of...296  
 Ohio Legislation, Recent, on Institutions—Wright...22  
 Ohio State Hospital Association, Third Annual Meeting of...57  
 Ohio to Study Problems of Hospitals, Medical Licensure, and Education...56  
 Oil as Fuel in Institutions—Peters...328



# INDEX

V

Old Persons: see Aged.	
Oleomargarine .....	246
Operating Room, White—Secor .....	170
Ophthalmic Hospitals and Dispensaries: see Eye Clinics and Dispensaries.	
Orange Extract—Street .....	17
Orthopedic Hospitals: see also Reconstruction Hospitals.	
Orthopedic Hospitals, British Military .....	294
Orthopedic Hospitals—	
New York American Emergency Hospital for the After-Care of Poliomyelitis—Ager .....	166
Orthopedics, War, Grace Gassette's Work in—Lester .....	92
Out-Patient Department of Hospital for Insane, Community Value of—MacDonald (Ab.) .....	69
Out-Patient Work with Children, Suggested Improvement for—McLean (Ab.) .....	450
Out-Patients, Registration of—Hadden (Ab.) .....	377

## P

Painting, Prepare to Do Some (Hint) .....	462
Paraffine Atomizer, Electrically Heated .....	309
Paris, Tuberculosis Hospitals in .....	321
Parresine Dressing for Burns, and Method of Its Scientific Application .....	147
Pathologist, Salary of (Q. and A.) .....	146
Pavia, Province of, Hospital Care in—Dori (Ab.) .....	226
Pennsylvania, Care and Treatment of Insane in County Institutions of—Sandy (Ab.) .....	378
Pennsylvania, Prevention of Blindness in .....	220
Peppermint Extract—Street .....	17
Pemanganate of Potash Substitute for Fumigation, Fumigato .....	457
Peters, John M.—Oil as Fuel in Institutions .....	328
Pfefferkorn, Blanche—Teaching of Bacteriology in Schools for Nurses .....	362
Phifer, Margaret Giffen—Small-Town Hospital—Some of Bases of Its Success .....	412
Philadelphia, Children's Hospital of, Public Health Work of—Dorwarth .....	242
Philadelphia General Hospital Heated Food Boxes—Wallace .....	301
Picture Takers Pretending to Represent THE MODERN HOSPITAL. Warning Against .....	272
Plaster-of-Paris Saw, Motor-Driven .....	229
Plaster Cutter, Mooring .....	382
Plumon, Eugene—Vade-Mecum for the Use of Officers and Interpreters in the Present Campaign (Bk. Rev.) .....	70
Poliomyelitis, New York American Emergency Hospital for After-Care of—Ager .....	166
Pollock, Robert—San Diego Group Diagnostic Clinic .....	251
Poor Farm, County, Insane in—Salmon (Ab.) .....	68
Poor House, The (verse)—Tensdale .....	27
Poorhouse Administration, Standards of—Bardwell .....	393
Porter, H. F.—Reducing the Hazard to Life in Non-Fireproof Hospital Buildings .....	333
Practice of Mobilized Physicians Graciously Cared for by Colleague (Ed.) .....	353
Preparedness, Wise, Another Feature of (Ed.) .....	185
Presbyterian Hospital, Chicago, Cooperation of Physicians, Nurses, and Patients Enlisted Successfully for Food Economy—Bacon .....	21
Prevention of Blindness—Maternity .....	219
Preventive Medicine, Department of in Children's Hospital—Dorwarth (Ab.) .....	291
Prison Eye Clinic—Farley (Ab.) .....	224
Prison System, Place of Psychiatric Clinic in .....	250
Prisoners, War, Hospitalization of .....	375
Psychiatric Clinic, Place of in Prison System .....	250
Psychiatric Services of the War—Alberti (Ab.) .....	450
Psychopathic Hospital, Origin of—Hill (Ab.) .....	68
Public Health Nursing and the Public—McCracken .....	297
Public Health Nursing, 1917 Annual Meeting of National Organization for—Fox .....	132
Public Health Service, United States, War Program of .....	292
Public Health Work, Dispensary as Factor in—Davis (Ed.) .....	268
Public Health Work, Family as Unit of—Beard .....	247
A Correction—Beard (Corr.) .....	454
Public Health Work of the Children's Hospital of Philadelphia—Dorwarth .....	242
Publicity, Hospital, as Means of Education and Support—Greene .....	336
Publicity in Hospital Matters .....	173
Publicity in the Hospital (Ed.) .....	351

## Q

Quartz Light Treatment, Experiences With—Sokolow (Ab.) .....	449
Quayle, John H.—Reclamation of Rejected Candidate for Army .....	415
Queen Alexandra's Hospital for Officers .....	122
Queries and Answers .....	72, 146, 379, 451

## R

R. U. V. Ultra-Violet Sterilizer .....	148
Railroad Hospital—	
Industrial Hospital of Northern Pacific Beneficial Association—Smith .....	244
Ransom, John E.—Function of a Dispensary .....	223
Ravenel, Mazyck P.—Prophylaxis of Venereal Disease (Ab.) .....	142
Recommendations, Demand Good (Hint) .....	151
Reconstruction Hospital, First Red Cross, in This Country .....	208
Reconstruction Hospital for Chicago .....	296
Reconstruction Hospitals for Prospective Recruits .....	128
Records, Case, Value of in Hospitals—Codman .....	426
Records, Training School: see Training School Records.	
Recruits, Sex Hygiene Exhibit for .....	138
Red Cross, First Climatic Military Institute of Opened at Bergeggi (Ab.) .....	67
Red Cross Home Nursing Courses .....	131
Red Cross, News Service of .....	27
Red Cross "Reconstruction Hospital," First, in this Country .....	208
Red Cross Society in Great Britain .....	444
Refrigerating Unit, Isko .....	456
Reid, M. L.—Buyer for the Hospital .....	128
Richardson, F. Belle—Colored Pupil Nurses (Corr.) .....	230

Riche, O., and Camus, J.—Special Center for the Examination and Complementary Treatment of Discharged and Wounded Soldiers (Ab.) .....	141
Richmond, Mary E.—Social Diagnosis (Bk. Rev.) .....	308
Riddle, Mary M.—How One of the Smaller Hospitals Hopes to Help Meet the Need for More Nurses .....	216
Rigby, Elfrida—Placing Cripples in Industry .....	417
Rockefeller Institute War Demonstration Hospital—Butler .....	73
Rockwood, H. L.—Sanatorium Blanket Problem .....	98
Roentgen-Ray Film Holder, Dorr Dental .....	71
Rogers, Allen—The Chemistry of Modern Washing .....	267
Rome, Hospitals of, Plan for Systematization of Buildings of (Ab.) .....	376
Rome (N. Y.) State Custodial Asylum for Feeble-Minded, Colonies of .....	28
Rose Extract—Street .....	17
Rossy, C. S.—Feeble-Minded in Industry .....	204
Russian Army, Field Hospital Presented to by France (Ab.) .....	68

## S

Saccharine, Use of, in Hospital Pharmacies (Ab.) .....	227
St. Anthony Hospital, Carroll, Iowa, has State University Branch Laboratory .....	246
St. John Ambulance Brigade Hospital, Etaples, France .....	126
St. John Ambulance Hospital, Southport, England .....	368
St. John's Hospital, Cleveland .....	200
St. Louis Jewish Home for Chronic Invalids of—Kaplan and Simon .....	459
St. Luke's Hospital of Methodist Episcopal Church, Cleveland .....	198
St. Luke's Hospital for Chinese of American Church Mission, Shanghai (Ab.) .....	142
St. Vincent Charity Hospital, Cleveland .....	200
Salmon, Thomas W.—Insane in a County Poor Farm (Ab.) .....	68
Salt Solution, Standard Normal (Q. and A.) .....	452
San Diego Group Diagnostic Clinic—Pollock .....	251
San Francisco Hospital, Tuberculosis Department of from Dietitian's Point of View—Abbott .....	447
San Juan del Monte Sanatorium, Treatment of Pulmonary Tuberculosis in—Fabella and Hernandez (Ab.) .....	141
Sanatorium Association Meeting, Minnesota .....	95
Sanatorium Blanket Problem—Rockwood .....	98
Sandy, William C.—Care and Treatment of Insane in County Institutions of Pennsylvania (Ab.) .....	377
Sarco Temperature Regulator .....	383
Saw, Motor-Driven Plaster-of-Paris .....	229
Scarburgh, R. S.—Welfare Work of the New York Telephone Co. .....	62
Scheffel, Carl—Plea for Married Institutional Physicians (Corr.) .....	230
Schippers, J. C.—New Division for Babies in Emma Children's Hospital in Amsterdam (Ab.) .....	377
Screens—Letts (Verse) .....	461
Scripps Memorial Foundation of San Diego—Pollock .....	251
Secor, William Lee—White Operating Room .....	170
Service Flag, Hospital—Young (Corr.) .....	453
Service Flags for Hospitals (Ed.) .....	420
Sex Hygiene Exhibit for Recruits .....	138
Sforza, N.—Tuberculosis in the War (Ab.) .....	68
Shanahan, William T.—Institutional Care of Epileptics .....	10
Ships, Hospital: see also Ambulance Boats.	
Ships, Hospital, French Military .....	317
Shutt, Cleveland H.—Municipal Training Schools for Nurses .....	354
Shuttleworth, G. E.—Mentally Deficient Children, Their Treatment and Training (Bk. Rev.) .....	145
Simon, Selig, and Kaplan, Elizabeth S.—Jewish Home for Chronic Invalids of St. Louis .....	459
Singer, H. D.—Modern Hospital for the Insane From the Standpoint of Medical Service (Ab.) .....	69
"Sister" Nurses in British Hospitals .....	144
Small-Town Hospital—Some Bases of Its Success—Phifer .....	412
Smith, H. B.—Industrial Hospital Managed by Employees .....	244
Smith, Herbert W., and Chadwick, Henry D.—Cafeteria Service for Tuberculosis Patients .....	403
Smith, Winford H.—Reorganization of the Civilian Hospitals on a War Basis .....	262
Soap and Time, Saving of .....	266
Soap, Laundry, as Substitute for Scrubbing Soaps (Hint) .....	151
Social Diagnosis—Richmond (Bk. Rev.) .....	308
Social Hygiene in the Army During War Time—Foster .....	65
Social Hygiene—Venereal Diseases .....	65
Social Service Work in an Eye Hospital or Dispensary, Possibilities of—Brannick .....	219
Social Workers, English-Italian Phrase Book for—Waller (Bk. Rev.) .....	308
Sokolow, P.—Experience With the Quartz Light Treatment (Ab.) .....	449
Soldiers at the Front, Bathing Facilities for .....	209
Soldiers, Crippled, Vocational Reeducation of .....	124
Soldiers' Dependents, Care of .....	372
Soldiers, Discharged Wounded, Special Center for Examination and Complementary Treatment of—Camus and Riche (Ab.) .....	141
Soldiers, Educational Work for—Bott .....	293
Soldiers, Wounded Canadian, Rehabilitation of .....	212, 292, 365
Soldiers, Wounded, Transportation of by Aeroplane—Blanchard (Ab.) .....	141
South, Hospitals of (Ed.) .....	419
Spanish Institute for the Protection of Infants, First—Cacace (Ab.) .....	69
Spearment Extract—Street .....	17
Splint for Fractures of Legs .....	71
Sponges: see also Surgical Dressings.	
St.; see as if spelled Saint.	
Standardization of Hospital Morbidity Statistics .....	183
Standardization of Hospitals (Ed.) .....	350
Standardization of Hospitals by Self-Marking (Ed.) .....	185
Standardization of Hospitals—Fixing of Standards (Ed.) .....	418
Standardization of Hospitals, General Committee of American College of Surgeons on .....	426
Standardization of Hospitals—Hornsby and Others—	
Class I, The University or Teaching Hospital .....	18, 103
Classes II and III, Semipublic Institutions .....	180
Class IV, Small Semipublic Hospitals .....	253
Class V, Small Semipublic Community Hospitals .....	341
Class VI, Large Municipal Hospitals .....	409
Standardization of Hospitals in China .....	460
Standardization of Hospitals, Session of American College of Surgeons on .....	183, 311, 421

State Hospitals and Agricultural Preparedness—Hurd (Ed.).....	24
Statistics, Morbidity, of Hospitals, Standardization of.....	183
Steffelaar, M.—Arrangement and Management of Large Barrack Hospital During the War (Ab.).....	449
Sterilizer, R. U. V. Ultra-Violet.....	148
Stewart, L. F.—Ambulance of the American Hospital of Paris as Seen by a Surgeon (Ab.).....	67
Street, John Phillips—Flavoring Extracts, Their Character and Com- position .....	15
Grape Juice, Lime Juice, and Loganberry Juice.....	96
Laxative Food Preparations and Their Composition.....	398
Summersgill, H. T.—Printed Forms to Prevent Waste of Food (Corr.) .....	380
Sunlight and Hospital Architecture—van Walsem (Ab.).....	376
Superintendents, Demand for Higher Grade (Hint).....	462
Supplies, Economical Use of, Controlling Basis for—Moss.....	318
Supplies, Hospital, Discussion of at American Hospital Association Meeting (Ed.) .....	184
Surgeon's Responsibility in the Economics of the Hospital—Marvel (Ab.) .....	68
Surgery, Artificial Daylight in—Luckiesch.....	311
Surgical Dressings, Economy in Cutting of—McGrath.....	8
Surgical Dressings, Reclaiming of—Test.....	22
Surgical Instruments and Hospital Equipment, Scarcity of—Mueller.....	90
Surgical Supplies, Economy in at New York Hospital for Ruptured and Crippled—Gibney .....	21
Switch, Electric Light (Q. and A.).....	72
Switzerland, Hospitalization of War Prisoners in.....	375
Syphilis and the General Hospital.....	266
Syphilis Dispensaries in Paris, Plan for—Brocq (Ab.).....	376
Syringes, Asepto .....	382

## T

Taft, Jessie—Demand Which Mental Hygiene Makes Upon the Graduate Nurse .....	133
Tandberg, O.—New Building of Indherred Hospital in the Northern Trondhjem District (Ab.).....	226
Taunton State Hospital, War Relief Work of—Cameron.....	370
Teasdale, Sara—The Poor House (verse).....	27
Telephone Company, New York, Welfare Work of.....	62
Teller, George L., and Wesener, J. A.—Conservation of Food .....60, 140, 218, 300, 374	
Temperature Regulator, Sarco.....	383
Test, Daniel D.—Reclaiming Used Gauze and Cotton.....	22
Thoma-Levy Haemocytometer .....	457
Throat and Nose Specialists, Move to Promote Training of— Wishart (Corr.) .....	453
Trachoma, Government's Work in Eradication of—McMullen.....	163
Train, Hospital: see also Cars, Hospital.	
Train, Hospital, Maryland State—Dunott.....	101
Training School Records—Bell .....	34
Training School Records, Uniform (Ed.).....	26
Training Schools for Nurses, Municipal—Shutt.....	354
Training Schools, Teaching of Bacteriology in—Pfefferkorn.....	362
Training Schools, Young Women for (Hint).....	462
Trains, Hospital, Management of—Fiorani (Ab.).....	67
Tuberculosis Activities in Ohio, Coordination of—McDowell (Ab.).....	450
Tuberculosis, Campaign Against in Cincinnati—Dinwiddie.....	400
Tuberculosis Campaign in New York State and Elsewhere.....	115
Tuberculosis, Causes of—Cobbett (Bk. Rev.).....	386
Tuberculosis Department of San Francisco Hospital From the Dic- tation's Point of View—Abbott.....	447
Tuberculosis Hospitals—	
Barlow Sanatorium (Economical Features of a California Sana- torium)—Klotz (Corr.) .....	453
Jasper County (Mo.) Tuberculosis Hospital—Cummings.....	406
Jewish Home for Chronic Invalids of St. Louis—Kaplan and Simon.....	459
Tuberculosis Hospitals in New York State.....	162
Tuberculosis Hospitals in Paris.....	321
Tuberculosis in the War—Sforza (Ab.).....	68
Tuberculosis, Need of Knowledge of Rather than Sanatoriums— Lapham (Corr.) .....	452
Tuberculosis, Osseous, Glandular, and Incipient Pulmonary, Urgent Need of Establishing Heliotherapeutic Institutes and Stations for Ambulatory Treatment of—Cozzolino (Ab.).....	450
Tuberculosis Patients, Cafeteria Service for—Chadwick and Smith.....	403
Tuberculosis, Pulmonary, Treatment of in San Juan del Monte Sana- torium—Fabella and Hernandez (Ab.).....	141
Tuberculosis Sanatorium, "Carit" (Ab.).....	376
Tuberculosis Sanatorium, First, Opening of at Biassono (Ab.).....	226
Tuberculosis Sanatorium for Chinese, Kuling (Ab.).....	377
Tuberculosis Sanatoriums and Hotel Sanatoriums in Region of Itatiaya—Souza (Ab.).....	376
Tuberculosis Sanatoriums, County, Opportunities and Needs of.....	239
Tuberculosis, What Ohio is Doing Against.....	387
Tuberculosis Work in a Small City.....	207

## U

U. S. Navy, Emergency Hospital Construction for—Braisted.....	87
Ultra-Violet Sterilizer, R. U. V.....	148
Upham, Elizabeth G.—Training Course for Occupational Experts.....	458
Urine, New Instruments for Testing Acidity and Presence of Albu- min in .....	149

## V

Vacations, Policy of Giving (Q. and A.).....	146
Vade-Mecum for Use of Officers and Interpreters in Present Cam- paign—Plumon (Bk. Rev.).....	70
Van Walsem, C.—Sunlight and Hospital Architecture (Ab.).....	376
Van Walsem, G. C.—Window of the Bedroom (Ab.).....	226
Vancouver General Hospital News.....	54
Vanilla Extract—Street .....	15
Vegetable Paring Machines, Victoria.....	383
Venereal Diseases, Prophylaxis of—Ravenel (Ab.).....	142
Ventilation and Humidity (Hint).....	462
Victoria Vegetable Paring Machines.....	383
Vigne, A., and Dumarest, F.—Work Cure in a People's Sanatorium (Ab.) .....	142
Visiting Nursing and Clinics—Haag.....	356

## W

Walker, Harry Leslie—Addison County Hospital, Middlebury, Vt....	240
Walker, Harry Leslie, and Goldwater S. S.—Henry W. Putnam Memorial Hospital, Bennington, Vt.....	1
Wallace, Helen L.—Philadelphia General Hospital Heated Food Boxes.....	301
Waller, Edith—English-Italian Phrase Book for Social Workers and Physicians' Supplement (Bk. Rev.).....	308
War: see also Army.	
War, The (Ed.).....	116
War and the Hospitals (Ed.).....	270
War Books .....	371
War Demonstration Hospital, Rockefeller Institute—Butler.....	73
War Department, Hospital Organization Under—Hornsby.....	88
War Department, Huge Task of Preparation Faced by.....	125
War, Effect of on Nursing Situation Abroad—McCracken.....	439
War, Great, Relation of Nurses' Training to—Baer.....	129
War Hospitals: see Military Hospitals.	
War, The—Its Hospital, Medical, and Nursing Aspects.....208, 292, 365, 442	
War, Medical Men in (Ed.).....	419
War Number, Special (Ed.).....	119
War Nursing, College-Trained Women for.....	31
War Orthopedics, Grace Gassette's Work in—Lester.....	92
War Prices Versus Waste (Ed.).....	420
War Prisoners, Hospitalization of, in Switzerland.....	375
War, Psychiatric Service of—Alberti (Ab.).....	450
War Relief Work of Taunton State Hospital—Cameron.....	370
War Stimulates Work in Massage.....	122
War This Month (Ed.).....	270
War Time, Institutional Economies for.....	20
War, Tuberculosis in—Sforza (Ab.).....	68
War Wounds, Heliotherapy in Treatment of—Magrassi (Ab.).....	377
War Wounds, Treatment of, and Carrel Hospital at Compiegne— Cherubini (Ab.) .....	450
Warner, A. R.—For Better Laundry Work (Corr.).....	135
Warner, A. R., Greene, Frederick D., and McEachern, Malcolm T.— Report of Committee on Accounting.....	355
Washing, Modern, Chemistry of—Rogers.....	267
Waste-Paper Profits (Q. and A.).....	146
Water Heater, Geyser Electric.....	150
Water, Sterilization of, Halazone for—Dakin and Dunham (Ab.).....	227
Wesener, J. A., and Teller, George L.—Conservation of Food .....60, 140, 218, 300, 374	
West Virginia State Hospital Association, Meeting of.....	357
West Virginia Hospital Association, a Correction.....	461
Where Garments and Americans Are Made—MacCarthy (Bk. Rev.).....	145
Williams, Anna E.—Story of the Light House.....	203
Wilson, J. G.—Contagious Disease Hospital for Immigrants at Ellis Island, N. Y.....	314
Wilson, R. P. C.—Institutional Care of the Moron.....	9
Wilson, Robert J.—Federal Inspection and Control of American Hos- pitals .....	233
Window, New Hospital.....	71
Window Shades, Best (Q. and A.).....	45
Wintergreen Extract—Street .....	15
Wishart, D. J. Gibb—Move to Promote Training of Nose and Throat Specialists (Corr.) .....	453
Women, Employment of, in the Military Hospitals in Place of Sol- diers (Ab.) .....	67
Wood, Francis Carter—Columbia War Hospital.....	112
Work Cure in People's Sanatorium—Dumarest and Vigne (Ab.).....	142
Workmen's Compensation and Hospitals—Howell and Buckley.....	234
Wounded, Camel Transport for .....	213
Wounded, Transportation and Care of, at Front.....	442
Wounds, Gasoline for Cleansing—Morton.....	231
Wounds, Treatment of—Chloramine-T Paste in.....	227
Wounds, War, Heliotherapy in Treatment of—Magrassi (Ab.).....	377
Wright, Howell—Recent Ohio Legislation on Institutions.....	22
Wright, Lucy—Vocational Work for the Blind in Massachusetts.....	201
Wright, Walter E.—Food Economies at Burke Foundation.....	20
Writing With the Knee, Apparatus for—Blachly (Ab.).....	226

## X

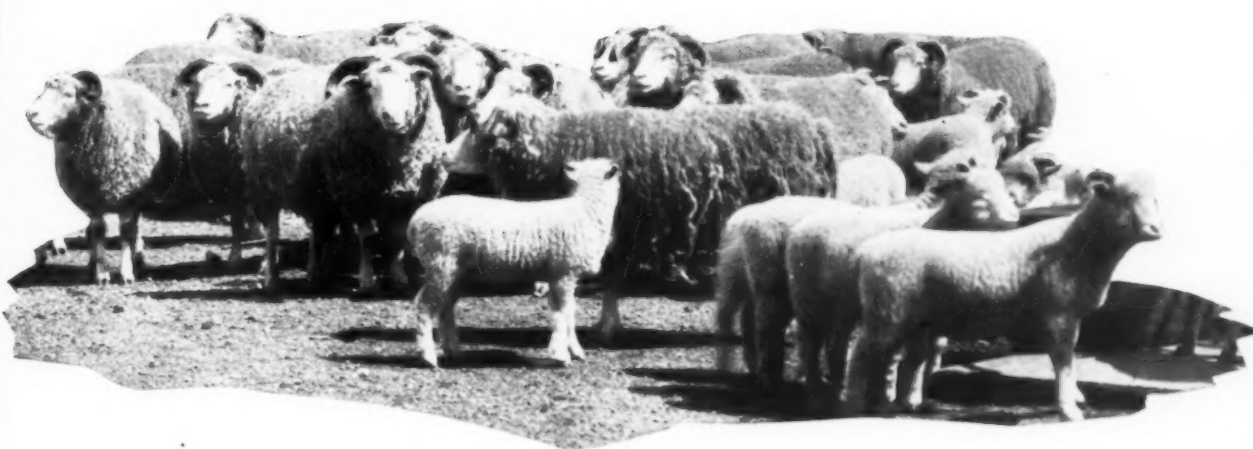
X-Ray Film Holder, Dorr Dental.....	71
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## Y

Yachts, Conversion of Into Ambulance Boats—Eaton.....	81
Young, Charles H.—Hospital Service Flag (Corr.).....	453



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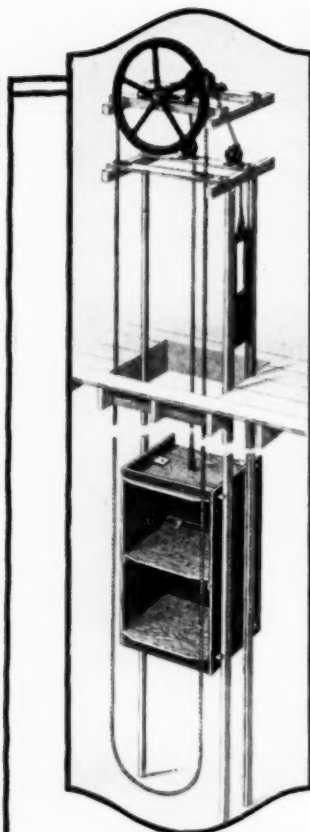
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They contain the outer bran coat of the wheat berry, which is so useful in stimulating peristalsis. Always glad to send samples of this product to physicians, nurses, and heads of hospitals.

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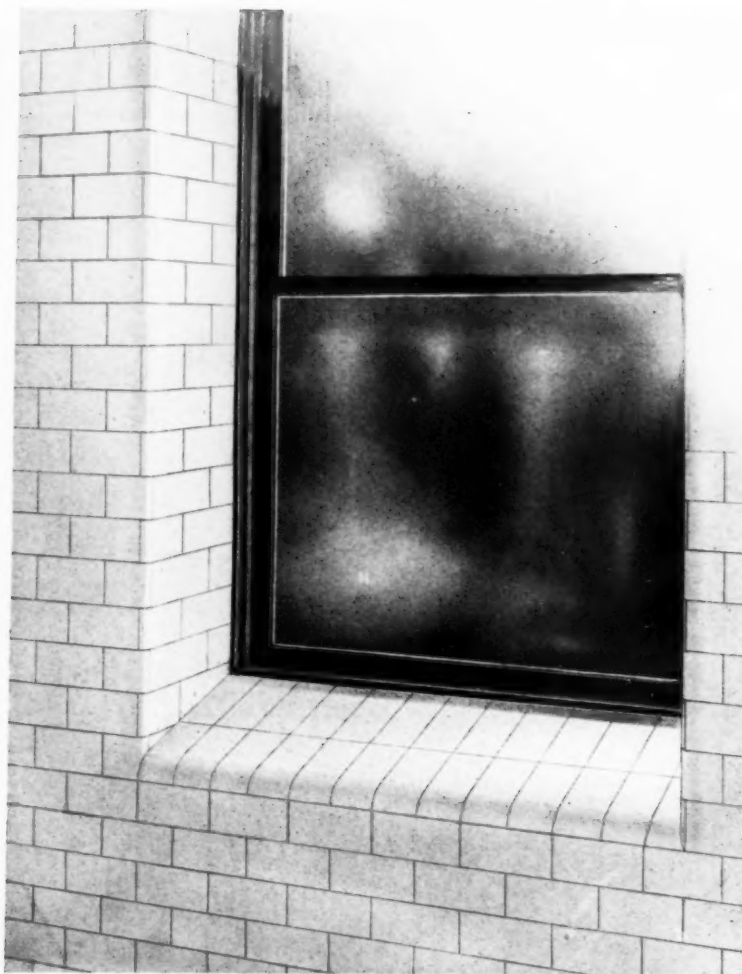
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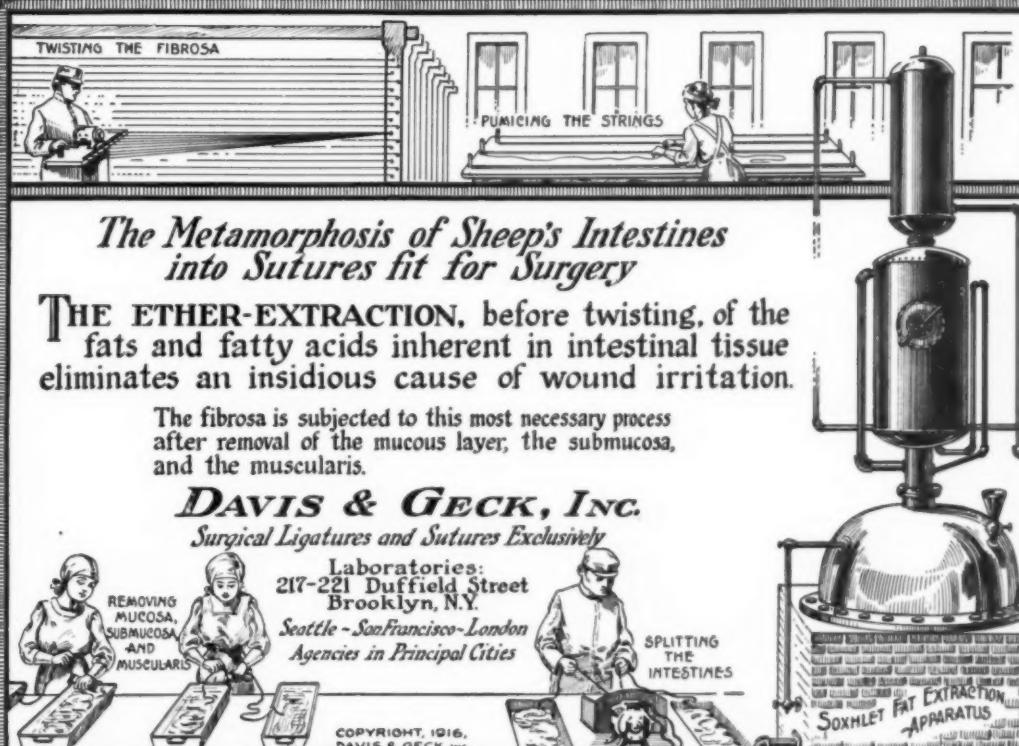
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**Pumicing the Strings**

**Removing Mucosa, Submucosa, and Muscularis**

**Splitting the Intestines**

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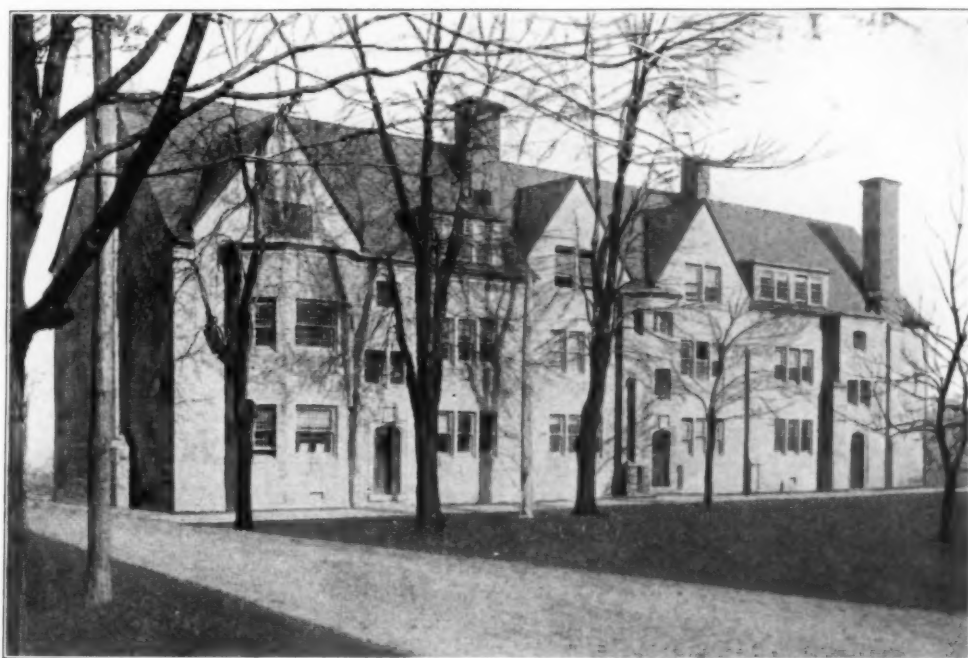


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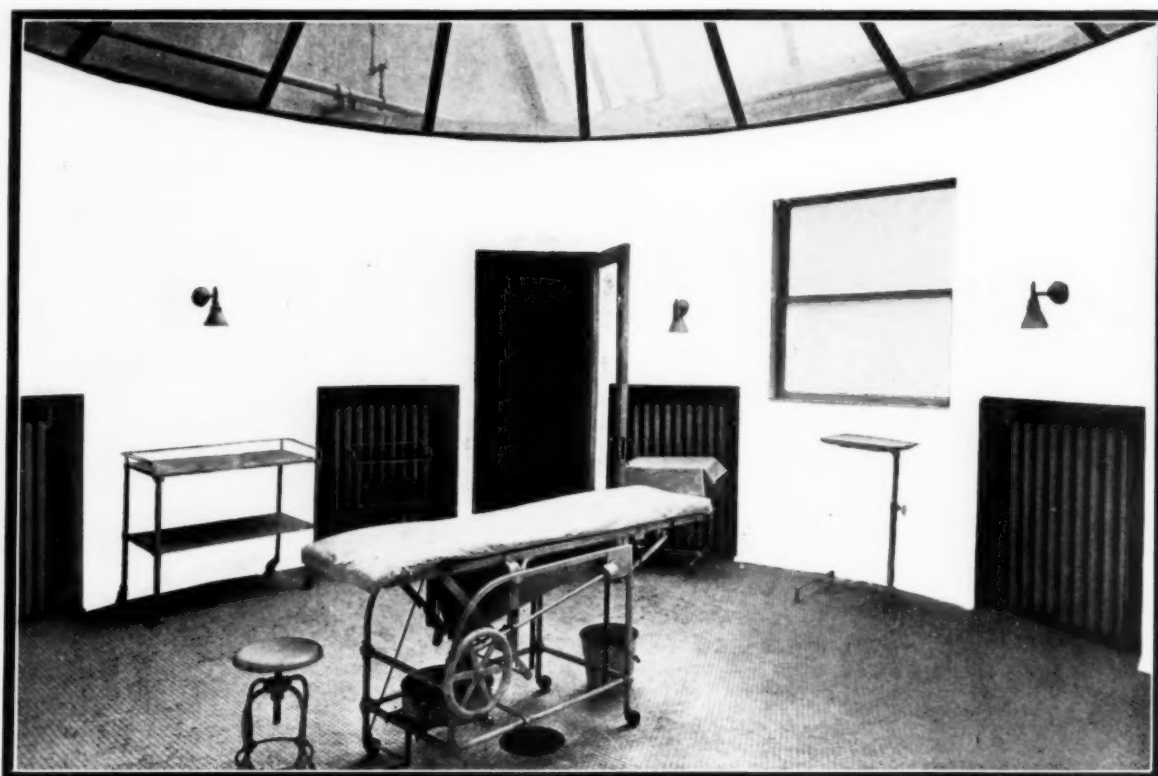
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We are a Hospital House exclusively, catering only to Hospitals, and building our goods especially for Hospital use—and incidentally also for Hospital abuse.

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"Hospital Beauty" H. W. Bags  
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"Solid Comfort" Invalid Rings  
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Three Sizes—13, 15 and 17 In.

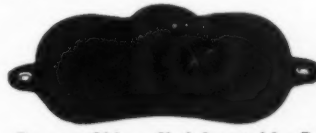


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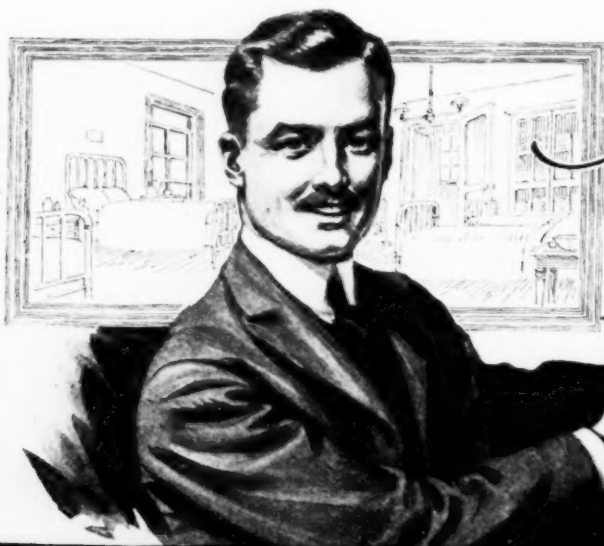
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For Emaciated and Bedridden Patients



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Maroon Sheeting*

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OTHERS TRY TO IMITATE**

The mere fact that so many imitations of the Meinecke Maroon Sheeting are offered to Hospitals *shows that the original must possess exceptional merit.*

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"I use a great deal of your talc in conjunction with my work. I find it a very pleasant agent with which to keep the skin comfortable and healthy in cases where patients are wearing jackets of various sorts. By means of a strip of gauze or muslin, called a scratcher, I draw Talc beneath the jacket. This keeps the patient comfortable and gives a sense of ease to the skin."

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## NEWS OF THE HOSPITAL FIELD

### Eastern States

St. Mark's Hospital, New York City, filed plans in November for alterations to cost \$10,000.

Dr. G. C. Robertson, of Charleston, W. Va., has recently been appointed superintendent of the Spencer (W. Va.) State Hospital, to succeed Dr. C. A. Barlow.

Dr. J. W. Luther has resigned the superintendency of the Palmerton Hospital, Palmerton, Pa., to accept a lieutenantancy in the army. He will be succeeded at the hospital by Dr. Kistler, of Lansford, Pa.

Improvements costing \$10,000 will be made at the Ontario County Tuberculosis Hospital at East Bloomfield, N. Y., this winter. A new laundry and a new refrigeration plant will be among the added facilities.

A plan to merge the Lebanon Hospital, the Bronx Hospital, and the Bronx Maternity Hospital, of New York City, and erect a 300-bed modern building to replace them, is being considered by officials of these institutions.

Dr. Theophile E. Gurtner, of New York, has recently purchased at 149 Mount Pleasant avenue, Newark, N. J., the former residence of William Clark, pioneer thread manufacturer, which he will convert into a private sanatorium.

Plans for a new home for the Good Samaritan Hospital, Sandusky, O., have been approved by the hospital authorities, and construction work on the building will proceed during the winter. Accommodations for 50 patients are to be provided.

Plans have been filed in New York City for alterations to a seven-story apartment house at Livingston place and Seventeenth street, to form a part of a new \$1,000,000 plant for Beth Israel Hospital. The main building will be 16 stories high.

About 2,000 Red Cross nurses had been sent to Europe by November 1, according to an announcement made from Red Cross headquarters in Washington. Fifteen thousand nurses have been enrolled, a number estimated as sufficient for an army of 1,500,000 men.

The Municipal Tuberculosis Hospital at Trenton, N. J., was destroyed by fire the night of November 6. There were 55 patients in the building, including several that were bed-ridden, but by heroic work on the part of the nurses all were safely removed.

The Hospital Development Commission of the state of New York will recommend to the next legislature of that state the appropriation of \$20,000,000 for improvements in the state hospital system during the next ten years. A great psychopathic hospital to be established in New York city is a part of the plan.

Dr. E. M. Green, former clinic director at the Georgia State Sanatorium at Milledgeville, has been appointed superintendent of the State Lunatic Hospital, Harrisburg, Pa., to succeed Dr. Henry M. Orth, and was expected to assume his new duties December 1. Dr. Orth is retiring after 27 years' service in the Harrisburg institution.

Bellevue Hospital and Kings County Hospital, clearing houses for alcoholic cases in their respective boroughs in New York City, report an enormous falling off in the number of such cases during the last few months. Bellevue is receiving only one-tenth as many alcoholics as it was caring for a year ago, and the Kings County institution not more than 50 percent. The decrease is attributed





## Is the Meat Used in Your Hospital Government Inspected?

***40% of the Meat Sold in the United States Is Not!***

Even out of the sixty percent that *is* examined, thousands of cattle, sheep, and hogs are found diseased and condemned by Federal Inspectors yearly.

And when you consider that in many states it is still possible to kill and prepare livestock *with no supervision of any kind*, it becomes doubly important to insist that the meats you buy show the Government Stamp.

Armour's Meat Products are Government Inspected. We are in hearty accord with this inspection, for it is an additional assurance to our customers that their meat products are prepared under proper conditions.



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Armour meats and a host of other foods are transported under refrigeration to our Branch Houses and distributing stations. They reach you with quality unimpaired. Call up our Branch Manager in your city or write us direct.

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GIVE LONG WEAR



Channel Slide Crib

Whitcomb Beds are built from casters up for *service*—whether in regular or special designs. We cooperate with institutions to work their individual thought into this durable Whitcomb construction.

**The Whitcomb Metallic Bedstead Co.**

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for laboratory purposes

**RABBITS  
GUINEA PIGS  
WHITE RATS  
WHITE MICE**

We are the largest shippers of laboratory animals in the world, and are in a position to make prompt shipments for small or large orders alike.

We pay express and guarantee safe arrival east of the Mississippi river.

*Monthly quotations on request*

**The Germantown Pigeon Lofts**

Box 55

Germantown, Pa.

partly to the high cost of liquors, but principally to the fact that there is steady work for all classes of men and consequently less frequenting of saloons.

Dr. Joseph B. Howland, acting resident physician at the Massachusetts General Hospital, Boston, has recently received and accepted an appointment as superintendent of the Peter Bent Brigham Hospital of that city. Dr. Howland does not expect to assume his new duties, however, until after the return of Dr. Frederick A. Washburn, superintendent of the Massachusetts General Hospital, from France, where he is in the government service.

America's first reconstruction hospital, where men crippled in the war will be fitted for suitable occupational pursuits, is to be built by the Benevolent and Protective Order of Elks. It will be located in Boston, contiguous to the Robert Bent Brigham Hospital, and will comprise twin ward buildings, vocational workshops, barracks, mess hall, etc., costing approximately \$250,000. The necessary funds will be available out of the \$1,000,000 war relief fund contributed by the members of the order.

The first four units of Buffalo's new city hospital have been formally opened for public inspection, and will be ready for patients about January 1. These units have a capacity of 373 beds. Only 273 beds are being installed at this time, however—249 for tubercular and 24 for psychopathic cases. The new hospital will be under the direct supervision of Dr. Walter S. Goodale, present superintendent of the city's hospitals and dispensaries. Ultimately it will consist of 20 buildings, representing an outlay of more than \$3,000,000.

Following the official appraisal of the estate of the late Mrs. Mary Warden Harkness, in New York City, bequests to various hospitals and kindred institutions under the will are announced as follows: St. Bartholomew's Clinic, New York, \$10,000; Morristown Memorial Hospital, Morristown, N. J., \$100,000; Germantown Hospital and Dispensary, Philadelphia, \$100,000; St. John's Guild, New York, \$50,000; Babies' Hospital, New York, \$100,000; St. Mary's Free Hospital for Children, New York, \$100,000. Mrs. Harkness was the widow of Charles W. Harkness, Standard Oil magnate.

A campaign to raise \$150,000 for a new homeopathic hospital was launched in Baltimore November 1. At the opening meeting, which was attended by about 200 men and women, including eighty homeopathic physicians, it was stated that seventy-five percent of the capacity of the proposed institution had been offered to the government and accepted by it for the free care of soldiers during the period of the war. The principal address at this meeting was delivered by Dr. C. E. Sawyer, of Marion, O., of the American Institute of Homeopathy. It is expected that the hospital will be built within a year, and the understanding is that it will be located in the northwestern part of the city.

The annual report of the United Hospital Fund, formerly the Saturday and Sunday Hospital Association, of New York City, contains the information that during the year ending September 30, 1917, the forty-six private hospitals benefiting from the fund cared for 136,412 bed patients, an increase of 3,797 over the preceding year. Out of this number, 72,606 persons were treated without cost to themselves, the total number of days of free treatment amounting to 1,307,432. This was 27,751 more days of free treatment than were given last year. The dispensaries were called on to give free treatment to 569,986, and there were 36,338 ambulance calls to answer. Of the 7,865 beds in the forty-six hospitals, 6,502 were occupied daily throughout the last twelve months. Contributions to the fund during the year amounted to \$133,579.

### Middle Western States

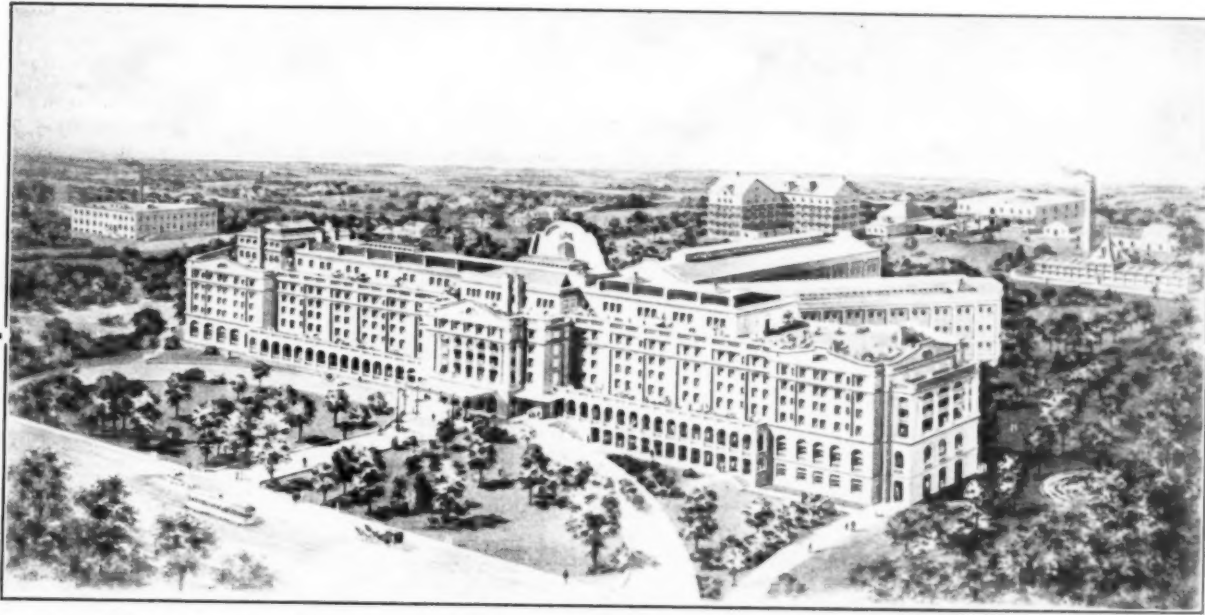
A \$75,000 addition to the Sacred Heart Hospital at Garrett, Ind., is nearing completion.

A hospital building is being erected in connection with the Oklahoma School for the Deaf, at sulphur.

A new home for St. Joseph's Mercy Hospital, Centerville, Ia., erected at a cost of \$50,000, was dedicated in November.

The Perry County (Ind.) Medical Association has





## Battle Creek Sanitarium Installed the *Fearless Dishwashing Systems*

because they meet every requirement in the complete cleansing and thorough sterilization of dishes necessary in the serving of 1200 patients.



*One of our special outfits made to fill customer's space*

The machine we constructed for the sanitarium people consists of four dishwashing units. But bear in mind that, no matter how many washing units the Fearless is made into, it is only necessary to run those required for the work in hand—power for each unit is independent and is shut off by an individual button. In case of failure of electric current, the Fearless Dishwasher is the only machine on the market which can be operated by hand power in such emergency.

Even if the needs of your hospital are not as exacting, we invite the same comparison and elimination of unsatisfactory outfits as the Battle Creek people have made. The FEARLESS stands every test and under the most difficult conditions. Tell us your space and we will gladly submit a plan.

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Chemical analyses and exhaustive comparative clinical tests have proven "M. C. W." Ether for Anesthesia to be superior in every respect, and led to its extensive use in many of the largest and foremost hospitals in this country and Canada.

We solicit inquiries from superintendents of hospitals, surgeons, and anesthetists interested in securing an Ether always uniform and of superior purity at moderate cost.

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### Bran Is Made Delightful Hidden in Wheat Flakes

We hide flake bran in rolled wheat flakes, so that users hardly suspect it.

The result is a savory dainty, welcome every morning.

Not so efficient as clear bran, perhaps, if people will eat clear bran. But they quit it, as you know.

Pettijohn's is something they don't quit. With Pettijohn's Flour it supplies a bran food for every meal, it wanted.

We made Pettijohn's to please our doctor friends. And thousands of other doctors have come to recommend it. It is certainly the most popular bran food made.

# Pettijohn's

**Rolled Wheat with Bran Flakes**

Soft, savory wheat rolled into luscious flakes, hiding 25 per cent of unground bran. A famous breakfast dainty.

Pettijohn's Flour is 75 per cent fine patent flour mixed with 25 per cent tender bran flakes. To be used like Graham flour in any recipe; but better, because the bran is unground.

**The Quaker Oats Company**

Chicago

(1754)

launched a movement for the erection of a hospital in Tell City. The city council has been asked to cooperate in undertaking.

Plans have been drawn for a \$50,000 hospital to be erected in connection with the University of Wisconsin at Madison.

The trustees of St. Luke's Hospital, Marquette, Mich., contemplate the erection of a \$12,000 isolation ward for this institution.

Dr. J. J. McKinnon, Wadena, Minn., is furthering a movement for the establishment in that city of a modern general hospital.

Dr. A. C. Putnam, Marshall, Mo., is providing larger quarters for his private hospital, which he has been conducting in his residence.

Dr. P. C. Davison opened an 11-bed private hospital at Willmar, Minn., November 2, with Miss Virginia Pelton, of Willmar, in charge as head nurse.

A new five-story addition, erected at a cost of \$105,000, will be opened this month by the Norwegian Hospital, Chicago. The building contains 60 rooms for patients.

The supervisors of Ottawa, Allegan, and Muskegon counties, Michigan, are considering the joint erection, by these three counties, of a modern tuberculosis hospital.

The city of Youngstown, O., has had plans drawn for the first unit of a municipal hospital. Twenty-five thousand dollars were voted for the erection of this building.

Miss Nettie B. Jordan, who has been superintendent of the Aurora Hospital, Aurora, Ill., for several years, has lately resigned this position and signed for foreign service.

The Lakewood Hospital at Lakewood, a suburb of Cleveland, O., will open new quarters about December 1. The building heretofore occupied by the hospital will be converted into a home for nurses.

The Lemmon Hospital Association has been incorporated at Lemmon, S. D., for the purpose of establishing a hospital. Dr. F. C. Totten heads the list of incorporators. The authorized capital stock is \$25,000.

The Oconto County Hospital, a privately operated institution at Oconto, Wis., was closed November 1. Lack of enough patients to pay operating expenses is given as the reason for discontinuing the institution.

The University Homeopathic Hospital at Columbus, O., on November 8, graduated its first class of nurses—four in number. The hospital maintains a three-year course and now has 25 pupils enrolled in its freshman and junior classes.

The Nebraska Orthopedic Hospital at Lincoln loses a bequest of \$80,000 from the late Charles Genuchi, wealthy Italian farmer, as a result of a decision by the state supreme court that Genuchi was not in his right mind when he made his will.

The county commissioners of Wayne County, Indiana, have appropriated \$1,000 for preliminary work on Smithvale—the well improved 250-acre farm recently given by Mrs. Clarissa Smith and family for a Wayne County tuberculosis sanatorium. Mrs. Smith, who is now ninety years old, lost three children through tuberculosis.

A campaign designed to raise \$500,000 for Columbia Hospital, Milwaukee, was opened in that city November 20. Half of the amount is needed to pay for a large new wing to the hospital, now under construction, and \$100,000 is wanted for the erection and equipment of a home and school for nurses. It is proposed to set aside the remainder for endowment.

Dr. Arthur B. Ancker, superintendent of the City and County Hospital, St. Paul, Minn., and who was elected president of the American Hospital Association at the Cleveland meeting, has recently been honored by the board of directors of the International Association of Rotary Clubs with an appointment as chairman of the hospital section of that organization.

One hundred and twenty-eight thousand have been raised by the Milwaukee Children's Hospital toward a fund of \$150,000, which it must secure to meet the con-





### Swiftness of Preparation

Occasionally a busy nurse finds time to sit down and write a dozen words or so in appreciation of a device or a product that has helped her in her work.

From City Hospital, Fall River, an experienced nurse writes that "The Chief factor in favor of Jell-O in hospital use is the swiftness of preparation."

The word swift had never occurred to us as aptly designating the process of making up Jell-O dishes, and we are indebted to a bright nurse for the suggestion.

To produce a dainty, attractive and delicious dish that will tempt the appetite of *anybody*, sick or well, by adding boiling water to a little

## JELL-O

and spending only a minute in doing it, might seem impossible if it were not known to be a process in constant use in American hospitals and American homets

And the more substantial dishes are made almost as easily and quickly as the simplest plain one, and they cost little more. In making these, Jell-O can, if desired, be whipped with an egg beater just as cream is whipped, and whipped Jell-O is taking the place of cream and eggs in many Jell-O dishes.

### Pure Fruit Flavors

Jell-O is put up in seven pure fruit flavors: Strawberry, Raspberry, Lemon, Orange, Cherry, Peach, Chocolate.

The pure fruit flavors are preserved in full strength by the airtight waxed paper safety bags enclosing Jell-O inside the package.

The price of Jell-O is 10 cents a package at any grocer's or any general store.

THE GENESEE PURE FOOD COMPANY, Ley Roy, N. Y., and Bridgeburg, Ont.



# 10% to 15% LESS COAL

Used in  
**Properly Humidified  
Hospitals**

## SUPERINTENDENTS

know that wards and private rooms will be comfortable at a temperature of 60 to 65 degrees, if the proper amount of humidity is introduced into the dry air, caused by steam and hot water radiators or hot air furnaces. If his dry air is not properly moistened, a temperature of 70 to 75 degrees is necessary for comfort. Dry air, will not hold heat. Heat will leave dry air and enter the walls, floors, and furniture, whereas air that has the proper amount of moisture will heat quicker and hold its heat longer.

**The Moisture Holds the Heat  
Dry Air is not Healthful**

**Humidify Your Hospital  
with**

**Steamo Air Moisteners  
for Steam Radiators**

**Herr Improved Humidifier  
for Furnace**

*Write for catalogue*

**J. W. McAFEE**

*Sole Selling Agent*

645 West 171 Street NEW YORK, N. Y.

ditions of a gift of an equal sum from Mr. and Mrs. Ferdinand Schlesinger. It is understood that a part of the \$300,000, when finally in hand, will be used to provide new buildings and the balance set aside as an endowment.

The Kansas City Tuberculosis Hospital at Leeds has been closed because of lack of funds for its operation, and the city patients are being cared for at the General Hospital, where wards have been fitted up especially for this purpose. The hospital at Leeds is practically new, having been opened less than two years ago. It was erected at a cost of about \$150,000 and has a capacity of 150 beds.

At Indianapolis, Ind., Sunnyside Sanatorium, in October, received from the directors of the disbanded Cheeryvale Summer Camp a gift of a dormitory and two other frame buildings. These will provide quarters for help, and somewhat increase the capacity of the institution to over seventy beds. Dr. Harold S. Hatch, formerly connected with the Michigan Tuberculosis Survey, is medical director of the sanatorium.

Preliminary plans have been completed by Architect Meyer J. Sturm, of Chicago, for a complete new plant for the Augustana Hospital, of that city, estimated to cost \$1,500,000. The new hospital will consist of a group of fireproof buildings, comprising a three-story administration building, 107x65; a seven-story ward building, 186x50; a seven-story private pavilion, 246x50; a six-story home for nurses, 130x42; and a power house. There will be beds for 500 patients.

The Columbus Maternity Hospital is a new institution at 492 South Third street, Columbus, O., where a large residence has been fitted up for the care of patients. A corporation composed of physicians has been formed to operate the hospital. Dr. A. Livingston Stage is president; Dr. J. A. Rieble, vice-president; Dr. H. C. A. Beach, secretary; and Dr. J. P. Merchant, treasurer. The hospital is to be open to all reputable physicians, and charity cases will be cared for.

Miss Margaret Rogers, superintendent of the Jewish Hospital, of St. Louis, was elected president of the Missouri State Nurses Association at the annual convention of that association recently held in St. Louis. The other new officers are as follows: Miss Elsie Ruffer, St. Luke's Hospital, St. Louis, first vice-president; Miss Anna M. Barr, Kansas City, second vice-president; Miss Jeanette Bond, St. Louis City Hospital, secretary; and Miss Janet Flanagan, St. Louis, treasurer.

Contracts covering the erection of a municipal hospital to cost about \$50,000, exclusive of equipment, were awarded by the city of Okmulgee, Okla., last month. The building is to be a three-story structure, 40x80, of steel, concrete and brick, with composition roof, and composition tile, wood, and cement floors. The equipment will include steam heat, electric lights, one automatic passenger elevator, and one freight elevator. Accommodations for about 50 patients will be provided.

The first annual meeting of the North Dakota Registered Nurses' Association was held at Bismarck the last week in October, and officers for the ensuing year were elected as follows: president, Miss Lena Ginther, St. Michael's Hospital, Grand Forks; vice-president, Miss Anna Simonitsch, Valley City; secretary-treasurer, Miss Jean F. Brown, Fargo. Misses Rose Clark and Ludvika Sletteback, of Fargo; Miss Mary McPake, of Bismarck; and Miss Rose Schaub, of LaMoure, were named as board members.

What is said to be the first private charitable tuberculosis sanatorium to be established in Wisconsin has just been opened at Madison by the Madison Anti-Tuberculosis Society. The plant consists of an administration building, an infirmary, and two cottages for convalescents, the total capacity being 30 beds. Miss Virginia Brooks, a graduate of Stout Institute and the home economics department of the University of Wisconsin, has been engaged as superintendent, and a graduate nurse is in charge of the infirmary. A staff of visiting physicians will treat the patients.

Dr. Benjamin F. Williams, superintendent of the Nebraska Hospital for the Insane, at Lincoln, has tendered his resignation to take effect January 1. Dr. Williams will take up private practice in Lincoln, confining himself



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